EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-11

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Rad Lab Audits

Contractor	Specify Section and paragraph of Contract SOW
CSRA LLC	3.1.4

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
In accordance with clause B.1 immediate start is authorized for this work assignment beginning on August 1, 2017. If the work plan is not approved within 35 calendar days after receipt of the work plan, the contractor shall stop work.

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

SFO (*Max 2*) ☐

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee	LOE
Contract Period: 08/01/2015 To 07/31/2018		0
This Action:		2,610
Total:		2,610

Work Plan / Cost Estimate Approvals

	Cost/Fee	LOE
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Michella Karapondo	(Signature)	(Date)	Branch/Mail Code: Phone Number: 513-569-7141 FAX Number:
Project Officer Name: Nancy Parrotta	(Signature)	(Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name	(Signature)	(Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart	(Signature)	(Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

DONNA REINHART

Digitally signed by DONNA REINHART
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546
Date: 2017.07.13 15:25:14 -04'00'

PERFORMANCE WORK STATEMENT
CSRA EP-C-15-012
Work Assignment No. 02-11
Period of Performance: 8/1/17-7/31/18

I. ADMINISTRATIVE:

A. Title: SRMD Radiochemistry Audit Support

B. Work Assignment Manager:

Michella Karapondo
Technical Support Center
Standards and Risk Management Division
Office of Ground Water and Drinking Water (OGWDW)
26 W. Martin Luther King Dr.
MS-140
Cincinnati, OH 45268
Phone: (513) 569-7141
FAX: (513) 569-7191
Email: karapondo.michella@epa.gov

Alternate Work Assignment Manager:

Glynda Smith
Technical Support Center
Standards and Risk Management Division
Office of Ground Water and Drinking Water (OGWDW)
26 W. Martin Luther King Dr.
MS-140
Cincinnati, OH 45268
Phone: (513) 569-7652
FAX: (513) 569-7191
Email: smith.glynda@epa.gov

C. Quality Assurance:

Task(s) ___1_____ in this Work Assignment (WA) requires quality assurance (QA). Consistent with the Agency's QA requirements, the contractor must prepare a complete Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. Work on this/these task(s) cannot proceed until the contractor receives notification of PQAPP approval from the Contract Level Contracting Officer Representative (CLCOR) via e-mail. The QA requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

D. Background:

The National Primary Drinking Water Regulations require public water systems to monitor for certain radiological contaminants, as per 40 CFR 141.26. To ensure data quality, as well as to fulfill requirements of 40 CFR 141.28, drinking water compliance samples must be analyzed by laboratories certified by the State or EPA, using promulgated methods found in 40 CFR 141.25 or their equivalent, as determined by EPA in accordance with 40 CFR 141.27, for analyzing samples for radiochemical contamination. The Office of Ground Water and Drinking Water, Technical Support Center, Laboratory Certification Program oversees the certification of laboratories analyzing samples for drinking water compliance monitoring. EPA Regions are responsible for determining the certification status for the state principal laboratory system in each primacy state within the Region. One of the requirements for state primary enforcement

responsibility ("primacy") under 40 CFR 142.10 is that states must have "laboratory facilities certified by the Administrator (EPA) and capable of performing analytical measurements of all contaminants specified in the State primary drinking water regulations." Typically, EPA personnel from each Region have responsibility for conducting periodic laboratory audits of the state facilities to ensure laboratory capability and to grant certification to those laboratories. However, at this time, most EPA Regions lack the expertise to perform audits of laboratories performing radiochemical analysis of drinking water compliance monitoring samples. Effort provided by the contractor through this work assignment will provide EPA with technical expertise to conduct audits of radiochemistry laboratories and provide technical assistance to EPA to allow EPA to determine if those laboratories should be granted drinking water certification for the radiochemical analytical methods.

II. OBJECTIVE:

The purpose of this work assignment is to provide technical assistance needed by Office of Water, Office of Ground Water and Drinking Water, Technical Support Center, Laboratory Certification Program, to evaluate the capability of selected laboratories analyzing samples for radiochemical contaminants in drinking water and provide recommendations about the drinking water certification status of these laboratories to the appropriate State and Regional Certification Officers. To achieve this purpose, the contractor shall be expected to conduct on-site audits and data audits of laboratories performing radiochemical analyses of drinking water compliance monitoring samples, and provide recommendations in reports and checklists to EPA and the appropriate State and Regional Certification Officers. This project supports programmatic support needs related to our national all hazards homeland security responsibilities by ensuring technical capability of laboratories analyzing drinking water samples for radiochemical contaminants.

This work assignment supports the mission of the Water Security Division (WSD) as described in the Water Security Strategy framework, which relates resources, activities, outputs, audience, short- and long- term outcomes to the WSD pillars of Prevention, Detection, Response, and Recovery. Additionally, this work assignment contributes to the commitments made in EPA's Strategic Plan: 2011 to 2015 and EPA's Homeland Security Strategy (2004). Under EPA's Strategic Plan, reference is made to Goal 2 (Clean and Safe Water), Objective 2.1 (Protecting Human Health), Sub-objective 2.1.1 (Water Safe to Drink), and to the Cross-Goal on homeland security. Under EPA's Homeland Security Strategy, reference is made to Objective 1 (Critical Infrastructure Protection).

In support of these requirements, this contract supports the nation's drinking and wastewater infrastructure, collectively known as the Water Sector, in being informed, coordinated, and prepared to prevent, detect, respond to, and recover from terrorist attack and other intentional acts, natural disasters, and other hazards (referred to as the "all hazards' approach), which may also occur, including the needs and challenges posed by natural disasters, catastrophic events, adaptation and impacts of climate change, floods, earthquakes, pandemic illness, and any other events which impact the safety and availability of our water supply.

In pursuit of these efforts, the contractor may be tasked with preparing a correlation summary comparing the results under this work assignment to the components of the Water Security Strategy framework.

This work will be completed commensurate with Task 3.1.4, Laboratory Support Capabilities of the Contract Level PWS. The level of effort estimated for this work assignment is 2,610 hours.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 - Work Plan Submission:
The contractor shall prepare a detailed work plan and budget for the accomplishment of the indicated tasks in accordance with the clause Work Assignments (EPAAR 1552.211-74). The work plan shall include a description of (a) proposed staff, (b) the number of hours and labor classifications proposed for each task, broken down to task level, to include both prime contractor and subcontractor labor, and (c) a list of deliverables, with due dates and schedule for deliverables.

In addition, the work plan shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract Level Quality Assurance Project Plan (QAPP) or a Project-Specific Quality Assurance Project Plan (PQAPP) is not required.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 01-11. This task also includes monthly progress and financial reports, which are to be submitted pursuant to Attachment 2 of the contract. Monthly financial reports must include a table with the invoice level of effort (LOE) and costs broken out by the tasks in this WA. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The contractor shall immediately notify the CLCOR and EPA WA Contracting Officer's Representative (COR) if any changes to the collection and analysis of the data is needed and prepare a PQAPP accordingly.

The contractor shall immediately alert the EPA WACOR to any anticipated event under the work assignment which may result in incurring an estimated $20,000 or more cost, funded by EPA, specific to that event (e.g., meeting or training). Those costs would include travel of prime and consultant personnel, planning and facilitation costs, audio/visual, and rental of venue costs. The EPA WACOR will prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Deliverables: Work plan, PQAPP and monthly progress and financial reports.

Task 1 - Audits of Radiochemistry Laboratories

The contractor shall assess the facilities, equipment, and scientific expertise of state principal laboratories which analyze samples for radiochemical contaminants in drinking water and determine compliance with the requirements of Chapters 1, 2, 3, and 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water, the radiochemistry drinking water methods in 40 CFR 141.25 and Appendix A to Subpart C of 141 as well as Alternate Test Procedure radiochemistry methods approved by OGWDW for drinking water. As directed by the EPA WACOR or designated Task Manager, the contractor shall perform on-site audits of up to twelve radiochemical laboratories, including but not limited to laboratories acting as the state principal laboratories of California, Connecticut, Iowa, Minnesota, New Jersey, Tennessee, and Texas. Additional laboratories will be identified by technical direction. If a laboratory acting as a state principal laboratory has been granted drinking water certification by a recognized state certification program, the contractor shall first assess documentation supporting that drinking water certification decision, including Laboratory Quality Assurance Plans/Manuals, Standard Operating Procedures, Proficiency Testing results and supporting data, and other related materials to determine if the certification decision meets the aforementioned requirements. If the supporting documentation does not meet the requirements of the drinking water certification program, the contractor may perform an on-site audit of the lab as directed by the EPA WACOR. The listing of laboratories is subject to change due to scheduling and resources. In performing these audits, the contractor shall make it clear to all laboratory staff that they are working as a contractor to the Environmental Protection Agency. The contractor also shall indicate that all questions of policy must be directed to EPA since the contractor cannot represent the Agency. (PWS Task 3.1.4, Laboratory Support Capabilities)

Contractor personnel performing radiochemical laboratory audits shall be familiar with Chapters 1, 2, 3, and 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water, the radiochemistry drinking water methods and analytical requirements in 40 CFR 141.25 as well as Alternate Test Procedure radiochemistry methods approved by OGWDW for drinking water, and audit checklists and other information provided by EPA. When possible, Regional and/or State Certification Officers will accompany the third party expert during the on-site audit. The contractor shall coordinate with regional and/or state personnel and the laboratory to schedule time for each audit with concurrence of the EPA WACOR. Audits should be scheduled such that some audits can be grouped by location to assist in reducing travel costs. The contractor shall copy all correspondence to the work assignment manager, including correspondence between the contractor and the Regional Certification Officer, and correspondence between the laboratory and the contractor should also be copied to the Regional Certification Officer and the EPA WACOR.

Prior to the audit, as needed, the EPA work assignment manager will hold a pre-audit teleconference with the Regional Certification Officer and the contractor to discuss scheduling the audit and to identify Regional preferences in conducting the audit. Prior to the scheduled audit, the contractor shall send a pre-audit checklist to the laboratory, allowing two weeks to respond. Example checklists can be found in Chapter 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water. The contractor must either develop an audit checklist based on the aforementioned requirements, or use a checklist provided by the EPA WACOR. Items on the audit checklist must provide references to Chapters 1, 2, 3, and 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water, the radiochemistry drinking

water methods and analytical requirements in 40 CFR 141.25 as well as Alternate Test Procedure radiochemistry methods. Checklists must clearly identify "findings", or items found in the laboratory which conflict with drinking water regulations, including promulgated analytical methods and documents incorporated into regulation by reference, and "recommendations", or items identified that are not conflicting with drinking water regulations or promulgated analytical methods, but the addition of which would improve the analytical capabilities of the laboratory being audited.

Prior to the audit, the contractor shall review the response from the laboratory to be audited for completeness. The contractor may call the laboratory to address missing or unclear items. The items to be reviewed prior to the audit could include Laboratory Quality Assurance Plans, personnel listings, proficiency testing (PT) results, and other laboratory data as applicable. If the items to be reviewed prior to an audit are insufficient or incomplete, the audit may be rescheduled while the laboratory provides a complete set of documentation. Audits should follow the protocols found in Appendix B of the Manual for the Certification of Laboratories Analyzing Drinking Water.

While on-site at the laboratory, the audit should include a brief opening meeting with laboratory personnel, and prior to leaving the laboratory, a closing meeting should be held to discuss with the laboratory any "findings" that will be discussed in the audit report.

The contractor shall provide a written summary of the results of each audit, using guidelines provided by EPA. A copy of the completed audit checklist shall accompany each report. The report may include observations not included on the checklist. The report shall clearly identify "findings", or items found in the laboratory which conflict with drinking water regulations, including promulgated analytical methods and documents incorporated into regulation by reference, and "recommendations", or items identified that are not conflicting with drinking water regulations or promulgated analytical methods, but the addition of which would improve the analytical capabilities of the laboratory being audited. "Findings" and "recommendations" should be clearly referenced in the report to the appropriate section of the Manual for the Certification of Laboratories Analyzing Drinking Water, the appropriate section of the promulgated analytical method, or the section of the Code of Federal Regulations. The report may also identify "findings" where actual laboratory practices conflict with the laboratory's own Quality Assurance Manual and SOPs; these "findings" should be clearly referenced to the laboratory's Quality Assurance documents.

In addition, the report shall clearly identify the analytical methods for which the laboratory and/or Region has requested certification, and the certification status of each method shall be clearly identified. Drinking water certification statuses can be found in the Manual for the Certification of Laboratories Analyzing Drinking Water, in chapter 3, section 8. Reports shall be signed and dated by persons performing the audit. Reports shall be sent to the appropriate Certification Officer, as designated by the WACOR, and to the WACOR. Technical questions regarding the report shall be answered by the contractor with review and approval by the WACOR; policy questions regarding the report shall be answered by the WACOR. If the EPA Region finalizes the draft lab evaluation report, the draft deliverable shall be considered the final evaluation report.

Deliverables: Draft and final lab evaluation reports and accompanying checklists. NOTE: If less than two weeks remain in the option period, the deliverable shall be the completed checklist and a listing of analytical methods and certification status for each method.

Task 2: Radiochemistry Technical Support.
The contractor shall provide technical support regarding the use of radiochemistry methods, radiochemistry applications, and related health physics concerns in support of laboratory certification or preparedness. The contractor shall maintain EPA's capacity to provide technical expertise by ensuring that the qualifications of assigned experts and technical response personnel meet the requirements of the Manual for the Certification of Laboratories Analyzing Drinking Water and current industry practices and standards. (PWS Task 3.1.4, Laboratory Support Capabilities).

Deliverables: Deliverables will be determined by the WACOR based on required response, and timing of such will be included on technical directives.

Task 3: Radiochemistry Auditor Training.
The contractor shall develop guidelines to assist Drinking Water Certification Officers in auditing radiochemistry laboratories. The contractor shall, in conjunction with the WACOR, develop text to be used in auditor training, including information on drinking water methods, instrumentation, auditing techniques, and criteria specified in the Manual for the Certification of Laboratories Analyzing Drinking Water.

Deliverables: Deliverables will be determined by the WACOR based on required response, and timing of such will be included on technical directives.

IV. SCHEDULE OF DELIVERABLES:

Specific deliverables, by Task, are detailed in the table below. All work will be determined by technical direction.

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0 - Workplan Submission		
Workplan and budget		According to contract
Monthly progress reports		Monthly
Task 1 -		

On-site laboratory audits	To be determined by technical direction; an exact date cannot be determined prior to receiving stakeholder feedback
Draft Laboratory Evaluation Report and Checklist	2 weeks after audit of the laboratory
Final Laboratory Evaluation Report and Checklist	1 week after receipt of comments from WACOR if applicable

Task 2 -	
Technical support provided as requested per technical direction	As directed by EPA WACOR
Task 3 –	
Draft script for Certification Officer Auditor training.	June 30, 2018

V. MISCELLANEOUS:

Software Application Files and Accessibility:
Software application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0
Preferred technology:	ESRI ArcGIS Desktop 10.4 or higher

The EPA WACOR shall identify which of delivered products will require 508 compliance.

VI. TRAVEL

The contractor shall anticipate up to twelve (12) contractor trips in support of this WA over the duration of the performance period. Travel will be directly related to the scope of this Work

Assignment and support advancement of the work under Task 1, as well as the EPA's Mission to ensure protection of human health and the environment.

VII. MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than $20,000, shall be obtained by the EPA CL-COR as needed and provided to the Contracting Officer (CO). Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL-COR.

VIII. CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, CL-COR and/or WACOR.

IX. PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

X. Technical Direction

The CLCOR or an authorized individual is permitted to provide technical direction. Technical direction must be within the statement of work of the contract and includes: (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work, (2) Comments on and approval of reports or other deliverables. Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the CLCOR.

XI. QUALITY ASSURANCE SURVEILLANCE PLAN:

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-11

☐ Other ☒ Amendment Number: 000001

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	SRMD Radiochem Lab Audits

Contractor	Specify Section and paragraph of Contract SOW
CSRA LLC	3.1.4

Purpose:
- ☐ Work Assignment
- ☒ Work Assignment Amendment
- ☐ Work Plan Approval
- ☐ Work Assignment Close-Out
- ☐ Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
The purpose of this amendment 1 to CSRA (EP-C-15-012) WA 02-11 is to amend the PWS to remove the conflicting QA language. There is no change to the level of effort hours in the original WA.

☐ Superfund — Accounting and Appropriations Data — ☒ Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
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Authorized Work Assignment Ceiling

	Contract Period:	Cost/Fee:	LOE:
	08/01/2015 To 07/31/2018		
This Action:			
Total:			

Work Plan / Cost Estimate Approvals

Contractor WP Dated:	Cost/Fee	LOE:
Cumulative Approved:	Cost/Fee	LOE:

Work Assignment Manager Name: Michella Karapondo (Signature) (Date)	Branch/Mail Code: Phone Number: 513-569-7141 FAX Number:
Project Officer Name: Nancy Parrotta (Signature) (Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name: (Signature) (Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart DONNA REINHART (Signature) (Date) Digitally signed by DONNA REINHART DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546 Date: 2017.07.27 14:42:05 -04'00'	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

PERFORMANCE WORK STATEMENT
CSRA EP-C-15-012
Work Assignment No. 02-11
Period of Performance: 8/1/17-7/31/18

I. ADMINISTRATIVE:

A. Title: SRMD Radiochemistry Audit Support

B. Work Assignment Manager:

Michella Karapondo
Technical Support Center
Standards and Risk Management Division
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Alternate Work Assignment Manager:

Glynda Smith
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C. Quality Assurance:

Task(s) ___1_____ in this Work Assignment (WA) requires quality assurance (QA). Consistent with the Agency's QA requirements, the contractor must prepare a complete Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. However, this WA is a continuation of WA 01-11 and does not require a new PQAPP. Work on this/these task(s) cannot proceed until the contractor receives notification of PQAPP approval from the Contract Level Contracting Officer Representative (CLCOR) via e-mail. The QA requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

D. Background:

The National Primary Drinking Water Regulations require public water systems to monitor for certain radiological contaminants, as per 40 CFR 141.26. To ensure data quality, as well as to fulfill requirements of 40 CFR 141.28, drinking water compliance samples must be analyzed by laboratories certified by the State or EPA, using promulgated methods found in 40 CFR 141.25 or their equivalent, as determined by EPA in accordance with 40 CFR 141.27, for analyzing samples for radiochemical contamination. The Office of Ground Water and Drinking Water, Technical Support Center, Laboratory Certification Program oversees the certification of laboratories analyzing samples for drinking water compliance monitoring. EPA Regions are responsible for determining the certification status for the state principal laboratory system in

each primacy state within the Region. One of the requirements for state primary enforcement responsibility ("primacy") under 40 CFR 142.10 is that states must have "laboratory facilities certified by the Administrator (EPA) and capable of performing analytical measurements of all contaminants specified in the State primary drinking water regulations." Typically, EPA personnel from each Region have responsibility for conducting periodic laboratory audits of the state facilities to ensure laboratory capability and to grant certification to those laboratories. However, at this time, most EPA Regions lack the expertise to perform audits of laboratories performing radiochemical analysis of drinking water compliance monitoring samples. Effort provided by the contractor through this work assignment will provide EPA with technical expertise to conduct audits of radiochemistry laboratories and provide technical assistance to EPA to allow EPA to determine if those laboratories should be granted drinking water certification for the radiochemical analytical methods.

II. OBJECTIVE:

The purpose of this work assignment is to provide technical assistance needed by Office of Water, Office of Ground Water and Drinking Water, Technical Support Center, Laboratory Certification Program, to evaluate the capability of selected laboratories analyzing samples for radiochemical contaminants in drinking water and provide recommendations about the drinking water certification status of these laboratories to the appropriate State and Regional Certification Officers. To achieve this purpose, the contractor shall be expected to conduct on-site audits and data audits of laboratories performing radiochemical analyses of drinking water compliance monitoring samples, and provide recommendations in reports and checklists to EPA and the appropriate State and Regional Certification Officers. This project supports programmatic support needs related to our national all hazards homeland security responsibilities by ensuring technical capability of laboratories analyzing drinking water samples for radiochemical contaminants.

This work assignment supports the mission of the Water Security Division (WSD) as described in the Water Security Strategy framework, which relates resources, activities, outputs, audience, short- and long- term outcomes to the WSD pillars of Prevention, Detection, Response, and Recovery. Additionally, this work assignment contributes to the commitments made in EPA's Strategic Plan: 2011 to 2015 and EPA's Homeland Security Strategy (2004). Under EPA's Strategic Plan, reference is made to Goal 2 (Clean and Safe Water), Objective 2.1 (Protecting Human Health), Sub-objective 2.1.1 (Water Safe to Drink), and to the Cross-Goal on homeland security. Under EPA's Homeland Security Strategy, reference is made to Objective 1 (Critical Infrastructure Protection).

In support of these requirements, this contract supports the nation's drinking and wastewater infrastructure, collectively known as the Water Sector, in being informed, coordinated, and prepared to prevent, detect, respond to, and recover from terrorist attack and other intentional acts, natural disasters, and other hazards (referred to as the "all hazards' approach), which may also occur, including the needs and challenges posed by natural disasters, catastrophic events, adaptation and impacts of climate change, floods, earthquakes, pandemic illness, and any other events which impact the safety and availability of our water supply.

In pursuit of these efforts, the contractor may be tasked with preparing a correlation summary comparing the results under this work assignment to the components of the Water Security Strategy framework.

This work will be completed commensurate with Task 3.1.4, Laboratory Support Capabilities of the Contract Level PWS. The level of effort estimated for this work assignment is 2,610 hours.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 - Work Plan Submission:

The contractor shall prepare a detailed work plan and budget for the accomplishment of the indicated tasks in accordance with the clause Work Assignments (EPAAR 1552.211-74). The work plan shall include a description of (a) proposed staff, (b) the number of hours and labor classifications proposed for each task, broken down to task level, to include both prime contractor and subcontractor labor, and (c) a list of deliverables, with due dates and schedule for deliverables.

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Deliverables: Work plan, PQAPP and monthly progress and financial reports.

Task 1 - Audits of Radiochemistry Laboratories

The contractor shall assess the facilities, equipment, and scientific expertise of state principal laboratories which analyze samples for radiochemical contaminants in drinking water and determine compliance with the requirements of Chapters 1, 2, 3, and 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water, the radiochemistry drinking water

methods in 40 CFR 141.25 and Appendix A to Subpart C of 141 as well as Alternate Test Procedure radiochemistry methods approved by OGWDW for drinking water. As directed by the EPA WACOR or designated Task Manager, the contractor shall perform on-site audits of up to twelve radiochemical laboratories, including but not limited to laboratories acting as the state principal laboratories of California, Connecticut, Iowa, Minnesota, New Jersey, Tennessee, and Texas. Additional laboratories will be identified by technical direction. If a laboratory acting as a state principal laboratory has been granted drinking water certification by a recognized state certification program, the contractor shall first assess documentation supporting that drinking water certification decision, including Laboratory Quality Assurance Plans/Manuals, Standard Operating Procedures, Proficiency Testing results and supporting data, and other related materials to determine if the certification decision meets the aforementioned requirements. If the supporting documentation does not meet the requirements of the drinking water certification program, the contractor may perform an on-site audit of the lab as directed by the EPA WACOR. The listing of laboratories is subject to change due to scheduling and resources. In performing these audits, the contractor shall make it clear to all laboratory staff that they are working as a contractor to the Environmental Protection Agency. The contractor also shall indicate that all questions of policy must be directed to EPA since the contractor cannot represent the Agency. (PWS Task 3.1.4, Laboratory Support Capabilities)

Contractor personnel performing radiochemical laboratory audits shall be familiar with Chapters 1, 2, 3, and 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water, the radiochemistry drinking water methods and analytical requirements in 40 CFR 141.25 as well as Alternate Test Procedure radiochemistry methods approved by OGWDW for drinking water, and audit checklists and other information provided by EPA. When possible, Regional and/or State Certification Officers will accompany the third party expert during the on-site audit. The contractor shall coordinate with regional and/or state personnel and the laboratory to schedule time for each audit with concurrence of the EPA WACOR. Audits should be scheduled such that some audits can be grouped by location to assist in reducing travel costs. The contractor shall copy all correspondence to the work assignment manager, including correspondence between the contractor and the Regional Certification Officer, and correspondence between the laboratory and the contractor should also be copied to the Regional Certification Officer and the EPA WACOR.

Prior to the audit, as needed, the EPA work assignment manager will hold a pre-audit teleconference with the Regional Certification Officer and the contractor to discuss scheduling the audit and to identify Regional preferences in conducting the audit. Prior to the scheduled audit, the contractor shall send a pre-audit checklist to the laboratory, allowing two weeks to respond. Example checklists can be found in Chapter 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water. The contractor must either develop an audit checklist based on the aforementioned requirements, or use a checklist provided by the EPA WACOR. Items on the audit checklist must provide references to Chapters 1, 2, 3, and 6 of the Manual for the Certification of Laboratories Analyzing Drinking Water, the radiochemistry drinking water methods and analytical requirements in 40 CFR 141.25 as well as Alternate Test Procedure radiochemistry methods. Checklists must clearly identify "findings", or items found in the laboratory which conflict with drinking water regulations, including promulgated analytical methods and documents incorporated into regulation by reference, and

"recommendations", or items identified that are not conflicting with drinking water regulations or promulgated analytical methods, but the addition of which would improve the analytical capabilities of the laboratory being audited.

Prior to the audit, the contractor shall review the response from the laboratory to be audited for completeness. The contractor may call the laboratory to address missing or unclear items. The items to be reviewed prior to the audit could include Laboratory Quality Assurance Plans, personnel listings, proficiency testing (PT) results, and other laboratory data as applicable. If the items to be reviewed prior to an audit are insufficient or incomplete, the audit may be rescheduled while the laboratory provides a complete set of documentation. Audits should follow the protocols found in Appendix B of the Manual for the Certification of Laboratories Analyzing Drinking Water.

While on-site at the laboratory, the audit should include a brief opening meeting with laboratory personnel, and prior to leaving the laboratory, a closing meeting should be held to discuss with the laboratory any "findings" that will be discussed in the audit report.

The contractor shall provide a written summary of the results of each audit, using guidelines provided by EPA. A copy of the completed audit checklist shall accompany each report. The report may include observations not included on the checklist. The report shall clearly identify "findings", or items found in the laboratory which conflict with drinking water regulations, including promulgated analytical methods and documents incorporated into regulation by reference, and "recommendations", or items identified that are not conflicting with drinking water regulations or promulgated analytical methods, but the addition of which would improve the analytical capabilities of the laboratory being audited. "Findings" and "recommendations" should be clearly referenced in the report to the appropriate section of the Manual for the Certification of Laboratories Analyzing Drinking Water, the appropriate section of the promulgated analytical method, or the section of the Code of Federal Regulations. The report may also identify "findings" where actual laboratory practices conflict with the laboratory's own Quality Assurance Manual and SOPs; these "findings" should be clearly referenced to the laboratory's Quality Assurance documents.

In addition, the report shall clearly identify the analytical methods for which the laboratory and/or Region has requested certification, and the certification status of each method shall be clearly identified. Drinking water certification statuses can be found in the Manual for the Certification of Laboratories Analyzing Drinking Water, in chapter 3, section 8. Reports shall be signed and dated by persons performing the audit. Reports shall be sent to the appropriate Certification Officer, as designated by the WACOR, and to the WACOR. Technical questions regarding the report shall be answered by the contractor with review and approval by the WACOR; policy questions regarding the report shall be answered by the WACOR. If the EPA Region finalizes the draft lab evaluation report, the draft deliverable shall be considered the final evaluation report.

Deliverables: Draft and final lab evaluation reports and accompanying checklists. NOTE: If less than two weeks remain in the option period, the deliverable shall be the completed checklist and a listing of analytical methods and certification status for each method.

Task 2: Radiochemistry Technical Support.
The contractor shall provide technical support regarding the use of radiochemistry methods, radiochemistry applications, and related health physics concerns in support of laboratory certification or preparedness. The contractor shall maintain EPA's capacity to provide technical expertise by ensuring that the qualifications of assigned experts and technical response personnel meet the requirements of the Manual for the Certification of Laboratories Analyzing Drinking Water and current industry practices and standards. (PWS Task 3.1.4, Laboratory Support Capabilities).

Deliverables: Deliverables will be determined by the WACOR based on required response, and timing of such will be included on technical directives.

Task 3: Radiochemistry Auditor Training.
The contractor shall develop guidelines to assist Drinking Water Certification Officers in auditing radiochemistry laboratories. The contractor shall, in conjunction with the WACOR, develop text to be used in auditor training, including information on drinking water methods, instrumentation, auditing techniques, and criteria specified in the Manual for the Certification of Laboratories Analyzing Drinking Water.

Deliverables: Deliverables will be determined by the WACOR based on required response, and timing of such will be included on technical directives.

IV. SCHEDULE OF DELIVERABLES:

Specific deliverables, by Task, are detailed in the table below. All work will be determined by technical direction.

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0 - Workplan Submission		
Workplan and budget		According to contract
Monthly progress reports		Monthly
Task 1 -		
On-site laboratory audits		To be determined by technical direction; an exact date cannot be determined prior to receiving stakeholder feedback

Draft Laboratory Evaluation Report and Checklist	2 weeks after audit of the laboratory
Final Laboratory Evaluation Report and Checklist	1 week after receipt of comments from WACOR if applicable

Task 2 -	
Technical support provided as requested per technical direction	As directed by EPA WACOR
Task 3 –	
Draft script for Certification Officer Auditor training.	June 30, 2018

V. MISCELLANEOUS:

Software Application Files and Accessibility:
Software application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0
Preferred technology:	ESRI ArcGIS Desktop 10.4 or higher

The EPA WACOR shall identify which of delivered products will require 508 compliance.

VI. TRAVEL

The contractor shall anticipate up to twelve (12) contractor trips in support of this WA over the duration of the performance period. Travel will be directly related to the scope of this Work Assignment and support advancement of the work under Task 1, as well as the EPA's Mission to ensure protection of human health and the environment.

VII. MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than $20,000, shall be obtained by the EPA CL-COR as needed and provided to the Contracting Officer (CO). Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL-COR.

VIII. CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, CL-COR and/or WACOR.

IX. PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

X. Technical Direction

The Contract level COR or an authorized individual is permitted to provide technical direction. Technical direction must be within the statement of work of the contract and includes: (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work, (2) Comments on and approval of reports or other deliverables. Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the Contract Level Contracting Officer Representative.

XI. QUALITY ASSURANCE SURVEILLANCE PLAN:

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-12

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	NHSRC SAM and Method Developme

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.7, 2.8.1, 2.8.2, 2.8.3, 2.8.4, 2.9, 3.1.2, 3.1.4

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
In accordance with clause B.1 immediate start is authorized for this work assignment beginning on August 1, 2017. If the work plan is not approved within 35 calendar days after receipt of the work plan, the contractor shall stop work.

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

SFO (*Max 2*): ☐

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee	LOE
Contract Period: 08/01/2015 To 07/31/2018		0
This Action:		2,860
Total:		2,860

Work Plan / Cost Estimate Approvals

	Cost/Fee	LOE
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Kathy Hall (Signature) (Date)	Branch/Mail Code:	
	Phone Number:	513-379-5260
	FAX Number:	
Project Officer Name: Nancy Parrotta (Signature) (Date)	Branch/Mail Code:	
	Phone Number:	202-564-5260
	FAX Number:	
Other Agency Official Name (Signature) (Date)	Branch/Mail Code:	
	Phone Number:	
	FAX Number:	
Contracting Official Name: Donna Reinhart (Signature) (Date)	Branch/Mail Code:	
	Phone Number:	513-487-2114
	FAX Number:	

DONNA REINHART

Digitally signed by DONNA REINHART
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546
Date: 2017.07.26 08:56:39 -04'00'

Work Assignment (WA)
Performance Work Statement (PWS)

WSD Contract No: EP-C-15-012
Work Assignment WA-02-12

Work Assignment Contract Officer Representative (WACOR):
Kathy Hall
Threat and Consequences Division
National Homeland Security Research Center
U.S. EPA Office of Research and Development
(513)379-5260
(513) 487-2555
hall.kathy@epa.gov
NG-16
26 West Martin Luther King Jr. Drive
Cincinnati, OH 45268

Alt. WACOR: **Romy Campisano**
Threat and Consequences Division
National Homeland Security Research Center
U.S. EPA Office of Research and Development
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(513) 487-2555
campisano.romy@epa.gov
NG-16
26 West Martin Luther King Jr. Drive
Cincinnati, OH 45268

LOE: 2860

Period of performance: August 1, 2017 to July 31, 2018

Title: National Homeland Security Research Center Selected Analytical Methods for Environmental Remediation and Recovery & Method Development

WSD Contract SOW Areas: 2.7, 2.8.1, 2.8.2, 2.8.3, 2.8.4, 2.9, 3.1.2, 3.1.3, 3.1.4, 3.1.9, 3.1.10, 3.1.14, 3.1.17, 3.1.19

I. PURPOSE

The purpose of this work is to provide continued support for the Environmental Protection Agency (EPA) National Homeland Security Research Center (NHSRC) initiatives in updating the Selected Analytical Methods for Environmental Remediation and Recovery (SAM) program; identifying, developing, and verifying analytical methods that can be used by multiple laboratories analyzing environmental samples during environmental remediation following a homeland security event; developing selected analytical and sample collection procedures; coordinating document reviews and revisions including compiling and responding to comments; facilitating procedure verifications; supporting an interactive web page including development and maintenance; and developing, revising and testing tools. These sampling and analytical methods and supporting documents, web page, and tools address the chemical, radiological, and biological analytes (CBR) listed in NHSRC's SAM document, and support EPA laboratory networks, including the Environmental Response Laboratory Network (ERLN) and Water Laboratory Alliance (WLA). Importantly, analytical methods verified under this Work Assignment (WA) shall be demonstrated to assure that their performance characteristics (e.g. accuracy, limit of detection and robustness) meet site remediation goals, i.e. site clearance, for re-occupation as existed prior to the contamination event. This project supports programmatic needs related to our national all hazards homeland security responsibilities of Securing and Sustaining Water Systems by protecting water systems from terrorist attacks and inadvertent disasters and detecting and recovering from successful attacks and the effects of disasters by leading efforts to provide States and water utilities with guidance, tools and strategies.

To achieve this purpose, the contractor shall provide technical, analytical, study coordination, and computer support. NHSRC will continue to coordinate with subject matter experts involved in developing SAM, including representatives from EPA Offices, EPA and State laboratories and representatives from the U.S. Centers for Disease Control and Prevention (CDC), Department of Agriculture (USDA), Food and Drug Administration (FDA), and U.S. Department of Homeland Security (DHS). NHSRC also will continue working with representatives from the Office of Solid Waste and Emergency Response (OSWER) and Office of Water (OW), where appropriate, to leverage and avoid duplication of existing efforts.

Under this work assignment, the contractor shall provide technical support to EPA's development of SAM, SAM addendums and companion documents, development and verification of selected analytical and sample collection procedures and protocols, development and maintenance of an interactive web site, and development and verification of laboratory methods to identify and measure chemical, radiological and biological analytes included in SAM. Contractor support will be required in the following areas:

- Data exchange, management, and review
- Single lab verification leading to multi-laboratory method validation studies
- Document development
- Document revisions. The contractor shall verify each document as drafted and conduct minor revisions as needed. If necessary, major revisions need to be promptly identified such that EPA can determine appropriate follow-on actions.
- Web page modifications and support

II. BACKGROUND:

After 9/11, EPA initiated an Environmental Response Laboratory Network (ERLN). The need to establish a network of laboratories to effectively respond to possible contamination scenarios resulting from terrorist attacks was identified as a national vulnerability. EPA will be responsible for the analysis of a large number of environmental samples in a short period of time putting a large demand on the nation's laboratory systems with respect to capacity and capability. NHSRC has the responsibility to research analytical methods to support the laboratories in measuring the many possible CBR agents that could be used in such attacks. Along with its partners, EPA has developed a document, Selected Analytical Methods for Environmental Remediation and Recovery (SAM) that compiles analytical methods which can be used during the remediation phase of cleanup. EPA is also working on additional documents such as collection procedures, companion documents, and analytical protocols which support the SAM. This work is designed to help assure analytical methods exist to quickly and accurately identify selected agents and quantify residual contamination levels following decontamination.

III. QA REQUIREMENTS

Task(s) 2 through 5 in this WA require the use of primary and/or secondary data. Consistent with the Agency's Quality Assurance (QA) requirements, the contractor must prepare a Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. Work on this/these task(s) cannot proceed until the contractor receives notification of PQAPP approval from the Contract Level Contracting Officer's Representative (CL COR) via e-mail. The QA requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

In addition, the work plan shall not include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. NHSRC has a separate contract vehicle that handles 508 compliance across the Center within the Immediate Office rather than have each project and task include it in various contracts and work assignments. Deliverables which will be needed to be made 508 compliant as part of the option period will be designated as such in the task narrative and delivery table.

IV. DETAILED TASK DESCRIPTION:

All direction under this WA will be provided as written technical direction from the WACOR, Alternate or WACOR as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the CL COR and the Contracting Officer (CO), and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate WACOR/ review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

The contractor shall perform the following tasks:

The contractor shall perform the following tasks in support of SAM, SAM addendums, SAM compendiums, development and verification of selected analytical and sample collection procedures, development and maintenance of a interactive web site and method development/verification addressing SAM analytes that may include 1) chemical 2) biological 3) radiological and 4) biotoxins.

Task 0: Work Plan, Progress evaluations, and Monthly Progress Reports

The contractor shall develop a WP that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a PQAPP, as noted above, and ensure the quality of primary and/or secondary data used to complete these tasks. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The WP shall explain when the PQAPP will be submitted based on the specific data requirements of the WA. Work on these tasks cannot proceed until the contractor receives notification of the new PQAPP approval from the CL COR via e-mail.

In each monthly progress report, the contractor shall, at the introduction to the discussion of this WA, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the WA. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing WA under this contract is not occurring.

Deliverables: Work plans, monthly progress and financial reports.

Task 1: Quality Assurance Project Plan (QAPP)

The contractor shall prepare a QAPP(s) in accordance with Quality Assurance (QA) Category B. Attachment 1 to this Performance Work Statement (PWS) provides information regarding **NHSRC QA Requirements/Definitions List.**

QAPPs prepared for a Category B project must be developed in accordance with the document titled "EPA Requirements for Quality Assurance Project Plans." EPA QA/R-5 can be found at https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf and QAPPS must be approved by an EPA Quality Assurance Manager (QAM) prior to the start of any literature searches (existing data), data collection, gathering, synthesizing, or data generation (laboratory) work.

At the discretion of the COR, Category B QAPP(s) can be either based on the R5 guidance (described above) or a project-specific QA requirements provided by the PI.

Additional information related to QA requirements can be found at www.epa.gov/quality.

The contractor must prepare Quality Assurance Project Plan(s) for approval by NHSRC. Work on NHSRC tasks cannot proceed until the contractor receives notification from the PO via e-mail that utilization of the QAPP is approved for use.

Deliverables: Quality Assurance Project Plan(s) (QAPP[s]).

Task 2: Selected Analytical Methods for Environmental Remediation and Recovery (SAM) application (website)

- Maintenance: The contractor shall maintain the current SAM application (website). The contractor shall provide application (website) maintenance and monitoring, including, but not limited to, checks of broken links, logging of comments and response to comments. The application (website) shall provide links as needed to SAM companion documents, analytical protocols, and sample collection plans or procedures.

- Searchability of Sample Collection Information Documents (SCID) in query tool: The contractor will develop a query tool to provide search capabilities of the revised SCID.

- Document Uploads: The contractor shall upload and make searchable the SAM 2017 document and newly revised SAM companion Sample Collection Information Documents (SCID) after revisions are complete. The Contractor shall upload newly developed SAM related sample collection procedures.

- The Contractor is requested to propose specific steps/activities necessary to achieve desired goals.

Deliverables: Functional interactive application (website) updated as directed by WACOR or Alternate WACOR

Task 3: Selected Analytical Methods for Environmental Remediation and Recovery (SAM)

The Contractor shall support NHSRC in the publishing of SAM 2017 and addendums as requested.

- SAM 2017: The Contractor shall support NHSRC in the updating and publishing of SAM 2017 as needed. The Contractor shall support the planning and execution of the 2017 revision including (but not limited to): preparing the document for the QA, tech edit and management reviews by collecting review comments, developing response to comment documentation for the QA review, resolution of comments with EPA WACOR/Alternate WACOR, prepare draft documents, prepare final 508 compliant document.

- Addendums: The Contractor shall support the planning and execution of each addendum including (but not limited to): develop the addendum, assist the EPA WACOR/Alternate WACOR with resolution of review comments as requested, prepare draft documents, prepare a final document, and post to the website. Addendums for both chemistry and radiochemistry methods will be possible for this option period.

Deliverables:

- SAM 2017: Final 508 Compliant document ready for publishing.
- Addenums: Final 508 Compliant documents ready for publishing as requested by WACOR or Alt-WACOR.

Task 4: SAM Companion Documents

The Contractor shall plan and execute, as requested, preparation of and /or updates to existing SAM related/companion documents. Document revision information may be generated during SAM 2017 workgroup sessions. This shall include, as applicable, up to 4 cycles of document review requiring

coordination, collection of comments, preparation of response to comment documents, resolution of comments with EPA WACOR/Alternate WACOR, and updating draft document based on received and accepted comments, and preparing final documents in support of, but not limited to, the below listed projects:

- The contractor shall provide support in the revision of the Laboratory Environmental Sample Disposal Information Document.

Deliverables: Final 508 compliant documents as requested by EPA.

Task 5: Technical Support for SAM Chemical and Radiochemical Procedures and Protocols.

The Contractor shall provide technical support for work related to chemical and radiochemical SAM products. This shall include (but not limited to) the development of, guidance documents, sample collection documents; preparation of comment/response documentation; participation in meetings and related meeting documentation; preparation of presentation and meeting materials in support of, but not limited to, the below listed projects:

- The contractor shall provide support in the development of the radiological sampling strategy document for building materials.

- The contractor shall provide support in the revision of the Sample Collection Procedures for Radiochemical Analytes in Environmental Matrices (2012 revision) to match information in SAM 2017 and add information that was put into the sample collection procedure for building materials.

Deliverables: See Section V

Task 6: Technical Support for Microbial Data Usability MicroSAP Companion Document:

The contractor shall provide technical support in the revision of the draft Microbial Data Usability Tool Companion Document, Sampling, Laboratory, and Data Reduction Considerations for Microbial Data Collected in the Field. This document summarizes considerations for planning, implementing, and assessing environmental microbial data collected from the field in order to ensure that the data collected is of known and sufficient quality for the intended purpose. The document covers considerations for sampling, analysis, and interpretation of samples and is in need of revision and updates.

- The Contractor shall plan and execute, as requested, revision and update of the Microbial Data Usability Tool companion document. This might also include addition of further resources and information to the document as needed.
- Content revisions will be determined by the EPA WAM based on information generated by the workgroup.
- After approval of the workgroup, the companion document will undergo, as applicable, up to 4 cycles of document review requiring coordination, collection of comments, preparation of response to comment documents, resolution of comments with EPA WAM/Alternate WAM, and updating the draft document based on received and accepted comments, and preparing final documents.

Deliverables: See Section V

Task 7: Technical Support for SAM Companion Document: Biological Sample Collection Procedure

The Contractor shall provide technical support for work related to biological SAM products. This will include (but not limited to) the development of sample collection documents; preparation of comment/response documentation; participation in meetings and related meeting documentation; preparation of presentation and meeting materials in support of developing sample collection procedures for pathogens.

Deliverables: See Section V

V. SCHEDULE/DELIVERABLES

Task	Deliverable	Due date
0	**Monthly Report**	Per contract requirements
1	**QAPP**	Revise/Draft 30 days after contract award, updated as necessary thereafter.
2	**SAM Application (web site)** Application: SCID Searchability: Modified SAM Query tool to search SCIDs Document Uploads:	 Updated upon EPA request*, updated for a new revision of SAM with 30 days of SAM being published. Determined when requested by EPA* Determined when requested by EPA*
3	**SAM Revision** SAM 2017: Final 508 Compliant document.	 Final document by October 31, 2017
4	**SAM Companion Documents** Chemistry/Radiochemistry/Biotoxin: SCID Final 508 Compliant document Pathogen SCID: Final 508 Compliant document	 Final document by October 31, 2017 Final document by October 31, 2017
5	**Chemical and Radiochemical SAM products and SAM methods** Sample collection strategy procedure for building materials: Final 508 Compliant document Revised Sample Collection Procedure for Environmental Matrices: Final 508 Compliant document	 Determined when requested by EPA* . Determined when requested by EPA* .
6	**Microbial Data Usability MicroSAP Companion Document** Final 508 Compliant document	 Final document by July 31, 2018
7	**Biological Sample Collection Procedure** Final 508 Compliant document: sample collection procedure/protocols for pathogens.	 Final document by July 31, 2018

* EPA will determine a schedule for delivery of a document/web update at the time of request the date will be provided through written technical direction

VI. REPORTING REQUIREMENTS

- Monthly Progress Reports (including a progress evaluation discussion)
- Financial Reports
- Project Specific PQAPP (if applicable)

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, Acquisition of environmentally preferable meeting and conference services (May 2007), for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05. AND the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated $20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare for approval the internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Any event which meets the definition of a "conference," with total net expenditures greater than $20,000, is required to submit EPA Electronic Form 5170 and Form 5170-A (with cost estimates/actuals). In the case the workflow system is down and CORs require emergency approval, they can submit EPA Form 5170 (PDF) (2pp, 93K) (with cost estimates) to conference@epa.gov.

IX. SOFTWARE APPLICATION AND ACCESSIBILITY (SECTION 508 REHABILITATION ACT AND AMENDMENTS)

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The WACOR shall identify which of delivered products will require 508 compliance.

QUALITY ASSURANCE SURVEILLANCE PLAN
for WSD's Mission Support

Quality Assurance Surveillance Plan

The requirements contained in this WA are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards in Attachment 4 of the contract. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The WACOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the CLCOR in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

Attachment 1: NHSRC QA Requirements/Definitions List

EPA's Quality System Website: http://www.epa.gov/quality

In accordance with EPA CIO 2105.0 (Order), EPA 2105-P-01-0 (Manual), and conformance to ANSI/ASQC E4 must be demonstrated by submitting the quality documentation described herein. All Quality documentation shall be submitted to the Government for review. The Government will review and return the quality documentation, with comments, and indicate approval or disapproval. If the quality documentation is not approved, it must be revised to address all comments and shall be resubmitted to the Government for approval. Work involving environmental data collection, generation, use, or reporting shall not commence until the Government has approve the quality documentation. The Quality Assurance Project Plan (QAPP) shall be submitted to the Government at least thirty (30) days prior to the beginning of any environmental data gathering or generation activity in order to allow sufficient time for review and revisions to be completed. After the Government has approved the quality documentation, the Contractor shall also implement it as written and approved by the Government.

NHSRC's Quality System Specifications for Extramural Actions –

These requirements typically pertain to single project efforts. The five specifications are:

(1) a description of the organization's Quality System (QS) and information regarding how this QS is documented, communicated and implemented;

(2) an organizational chart showing the position of the QA function;

(3) delineation of the authority and responsibilities of the QA function;

(4) the background and experience of the QA personnel who will be assigned to the project; and

(5) the organization's general approach for accomplishing the QA specifications in the SOW.

NHSRC QA Requirements/Definitions List

Category Level Designations (determines the level of QA required):

☐ **Category A Project (formerly Category 1 and 2)** – applies to research that is anticipated to result in high-visibility products. In this case, the QAPP shall address all elements listed in "EPA Requirements for QA Project Plans, EPA QA/R-5. **http://www.epa.gov/quality/qs-docs/r5-final.pdf**

Research of this nature meets one or more of the following criteria:

- Results are ISI
- Has a high probability the results could be used in litigation or enforcement
- Is a HISA
- Direct regulatory support

☐ **Category B Project (formerly Category 3 and 4)** - applicable to projects that do not meet the criteria for Category A. In lieu of using "EPA Requirements for QA Project Plans, EPA QA/R-5, a QAPP may be developed in accordance with NHSRC's QAPP requirement templates. This decision is made by the Principal Investigator or lead researcher.

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Additional information regarding Q**APP** requirements for a specific project type are provided below.

Project Types:

NHSRC's QAPP Requirements templates are available for Applied Research Projects, Sampling and analysis Project, Method Development Project, and Existing Data Project. These templates are condensed from applicable sections of R-5 (EPA Requirements for QA Project Plans) and are intended to serve as a starting point when preparing a QAPP. These templates and their format may not fit every research scenario and QAPP's must conform to applicable sections of R-5 in a way that fully describes the research plan and appropriate QA and QC measures to ensure that the data are of adequate quality and quantity to fit their intended purpose.

☐ **Applied Research Project** - pertains to a study performed to generate data to demonstrate the performance of accepted processes or technologies under defined conditions. These studies are often pilot- or field-scale.

☐ **Sampling and Analysis Project** - pertains to the collection and analysis of samples with no objectives other than to provide characterization or monitoring information.

☐ **Existing Data Project** - pertains to environmental data collected from other sources, by or for EPA, that are used for purposes other than those originally intended. Sources may include: literature, industry surveys, compilations from computerized databases and information systems, and computerized or mathematical models of environmental processes.

☐ **Method Development Project** - pertains to situations where there is no existing standard method, or a standard method needs to be significantly modified for a specific application.

For other types of project types, the EPA Guidance documents are available. All QAPPs must conform to applicable sections of R-5 in a way that fully describes the research plan and appropriate QA and QC measures to ensure that the data are of adequate quality and quantity to fit their intended purpose. The specific and general guidance documents can be found at http://www.epa.gov/quality/qa_docs.html#guidance

☐ **Design, Construction, and/or Operation of Environmental Technology Project** - pertains to environmental technology designed, constructed and/or operated by and/or for EPA. The QAPP shall address requirements in the EPA Quality System document "Guidance on Quality Assurance for Environmental Technology Design, Construction, and Operation" (EPA QA/G-11)

☐ **Geospatial Data Quality Assurance Project** - pertains to data collection; data processing and analysis; and data validation of geospatial applications. The QAPP shall address requirements in the EPA Quality System document "Guidance for Geospatial Data Quality Assurance Project Plans" EPA QA /G-5S).

☐ **Model Development Project** - includes all types of mathematical models including static, dynamic, deterministic, stochastic, mechanistic, empirical, etc. The QAPP shall address requirements in the EPA Quality System document "Guidance for Quality Assurance Project Plans for Modeling" (EPA QA/G-5M)

Definitions:

Environmental Data - These are any measurement or information that describe environmental processes, location, or conditions; ecological or health effects directly from measurements, produced from software and models, and compiled from other sources such as data bases or the literature. For EPA, environmental data include information collected directly from measurements, produced from software and models, and compiled from other sources such as data bases or literature.

Incremental Funding - Incremental funding is partial funding, no new work.

Quality Assurance (QA) - Quality assurance is a system of management activities to ensure that a process, item, or service is of the type and quality needed by the customer. It deals with setting policy and running an administrative system of management controls that cover planning, implementation, and review of data collection activities and the use of data in decision making. Quality assurance is just one part of a quality system.

Quality Assurance Project Plan (QAPP) - A QAPP is a document that describes the necessary quality assurance, quality control, and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A QAPP documents project-specific information.

Quality Control (QC) - Quality control is a technical function that includes all the scientific precautions, such as calibrations and duplications, which are needed to acquire data of known and adequate quality.

Quality Management Plan (QMP) - A QMP is a document that describes an organization's/program's quality system in terms of the organizational structure, policy and procedures, functional responsibilities of management and staff, lines of authority, and required interfaces for those planning, implementing, documenting, and assessing all activities conducted. A QMP documents the overall organization/program, and is primarily applicable to multi-year, multi-project efforts. An organization's/program's QMP shall address all elements listed in the "Requirements for Quality Management Plans" in Appendix B of the NHSRC QMP.

Quality System - A quality system is the means by which an organization manages its quality aspects in a systematic, organized manner and provides a framework for planning, implementing, and assessing work performed by an organization and for carrying out required quality assurance and quality control activities.

R-2. EPA Requirements for Quality Management Plans (EPA/240/B-01/002) March, 2001
http://www.epa.gov/quality/qs-docs/r2-final.pdf

R-5. EPA Requirements for Quality Management Plans (EPA/240/B-01/002) March, 2001
http://www.epa.gov/quality/qs-docs/r5-final.pdf

Substantive Change - Substantive change is any change in an activity that may alter the quality of data being used, generated, or gathered.

Principal Investigator (PI) - This person is technically responsible for the project. For extramural contract work, the PI is typically the contracting officer's representative (COR). For intramural work, the lead researcher is typically the Principal Investigator.

Abbreviations:

COR	Contracting Officer's Representative	IAG	Interagency Agreement
NHSRC	National Homeland Security Research Center	QA	Quality Assurance
QA ID	Quality Assurance Identification	QAM	Quality Assurance Manager
QAPP	Quality Assurance Project Plan	QMP	Quality Management Plan
QS	Quality System	SOW	Statement of Work
PI	Principal Investigator	CRADA	Cooperative Research & Development Agreement

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-12

☐ Other ☒ Amendment Number: 000001

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	NHSRC SAM and Method Developm

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.7, 2.8.1, 2.8.2, 2.8.3, 2.8.4, 2.9, 3.1.2, 3.1.4

Purpose:
- ☐ Work Assignment
- ☒ Work Assignment Amendment
- ☐ Work Plan Approval
- ☐ Work Assignment Close-Out
- ☐ Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
This is a no cost increase, no hour increase amendment 1 to CSRA (EP-C-15-012). EPA is eliminating task 7, Tech Support for SAM Companion Document and moving those hours to Task 2, the SAM webpage revision and query search. There are no other changes in this amendment 1.

☐ Superfund — Accounting and Appropriations Data — ☒ Non-Superfund

SFO (Max 2): ☐

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Contract Period:	Cost/Fee:	LOE:
	08/01/2015 To 07/31/2018		
This Action:			
Total:			

Work Plan / Cost Estimate Approvals

		Cost/Fee	LOE:
Contractor WP Dated:	8/18/17	$309,156.90	3,303
Cumulative Approved:		$309,156.90	3,303

Work Assignment Manager Name: Kathy Hall (Signature) (Date)		Branch/Mail Code: Phone Number: 513-379-5260 FAX Number:
Project Officer Name: Nancy Parrotta (Signature) (Date)		Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name (Signature) (Date)		Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart Donna Reinhart (Signature)	1/26/2018 (Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

Work Assignment (WA)
Performance Work Statement (PWS)

WSD Contract No: EP-C-15-012
Work Assignment WA-02-12

Work Assignment Contract Officer Representative (WACOR):
Kathy Hall
Threat and Consequences Division
National Homeland Security Research Center
U.S. EPA Office of Research and Development
(513)379-5260
(513) 487-2555
hall.kathy@epa.gov
NG-16
26 West Martin Luther King Jr. Drive
Cincinnati, OH 45268

Alt. WACOR: **Romy Campisano**
Threat and Consequences Division
National Homeland Security Research Center
U.S. EPA Office of Research and Development
(513)569-7016
(513) 487-2555
campisano.romy@epa.gov
NG-16
26 West Martin Luther King Jr. Drive
Cincinnati, OH 45268

LOE: 2860

Period of performance: August 1, 2017 to July 31, 2018

Title: National Homeland Security Research Center Selected Analytical Methods for Environmental Remediation and Recovery & Method Development

WSD Contract SOW Areas: 2.7, 2.8.1, 2.8.2, 2.8.3, 2.8.4, 2.9, 3.1.2, 3.1.3, 3.1.4, 3.1.9, 3.1.10, 3.1.14, 3.1.17, 3.1.19

I. PURPOSE

The purpose of this work is to provide continued support for the Environmental Protection Agency (EPA) National Homeland Security Research Center (NHSRC) initiatives in updating the Selected Analytical Methods for Environmental Remediation and Recovery (SAM) program; identifying, developing, and verifying analytical methods that can be used by multiple laboratories analyzing environmental samples during environmental remediation following a homeland security event; developing selected analytical and sample collection procedures; coordinating document reviews and revisions including compiling and responding to comments; facilitating procedure verifications; supporting an interactive web page including development and maintenance; and developing, revising and testing tools. These sampling and analytical methods and supporting documents, web page, and tools address the chemical, radiological, and biological analytes (CBR) listed in NHSRC's SAM document, and support EPA laboratory networks, including the Environmental Response Laboratory Network (ERLN) and Water Laboratory Alliance (WLA). Importantly, analytical methods verified under this Work Assignment (WA) shall be demonstrated to assure that their performance characteristics (e.g. accuracy, limit of detection and robustness) meet site remediation goals, i.e. site clearance, for re-occupation as existed prior to the contamination event. This project supports programmatic needs related to our national all hazards homeland security responsibilities of Securing and Sustaining Water Systems by protecting water systems from terrorist attacks and inadvertent disasters and detecting and recovering from successful attacks and the effects of disasters by leading efforts to provide States and water utilities with guidance, tools and strategies.

To achieve this purpose, the contractor shall provide technical, analytical, study coordination, and computer support. NHSRC will continue to coordinate with subject matter experts involved in developing SAM, including representatives from EPA Offices, EPA and State laboratories and representatives from the U.S. Centers for Disease Control and Prevention (CDC), Department of Agriculture (USDA), Food and Drug Administration (FDA), and U.S. Department of Homeland Security (DHS). NHSRC also will continue working with representatives from the Office of Solid Waste and Emergency Response (OSWER) and Office of Water (OW), where appropriate, to leverage and avoid duplication of existing efforts.

Under this work assignment, the contractor shall provide technical support to EPA's development of SAM, SAM addendums and companion documents, development and verification of selected analytical and sample collection procedures and protocols, development and maintenance of an interactive web site, and development and verification of laboratory methods to identify and measure chemical, radiological and biological analytes included in SAM. Contractor support will be required in the following areas:

- Data exchange, management, and review
- Single lab verification leading to multi-laboratory method validation studies
- Document development
- Document revisions. The contractor shall verify each document as drafted and conduct minor revisions as needed. If necessary, major revisions need to be promptly identified such that EPA can determine appropriate follow-on actions.
- Web page modifications and support

II. BACKGROUND:

After 9/11, EPA initiated an Environmental Response Laboratory Network (ERLN). The need to establish a network of laboratories to effectively respond to possible contamination scenarios resulting from terrorist attacks was identified as a national vulnerability. EPA will be responsible for the analysis of a large number of environmental samples in a short period of time putting a large demand on the nation's laboratory systems with respect to capacity and capability. NHSRC has the responsibility to research analytical methods to support the laboratories in measuring the many possible CBR agents that could be used in such attacks. Along with its partners, EPA has developed a document, Selected Analytical Methods for Environmental Remediation and Recovery (SAM) that compiles analytical methods which can be used during the remediation phase of cleanup. EPA is also working on additional documents such as collection procedures, companion documents, and analytical protocols which support the SAM. This work is designed to help assure analytical methods exist to quickly and accurately identify selected agents and quantify residual contamination levels following decontamination.

III. QA REQUIREMENTS

Task(s) 2 through 5 in this WA require the use of primary and/or secondary data. Consistent with the Agency's Quality Assurance (QA) requirements, the contractor must prepare a Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. Work on this/these task(s) cannot proceed until the contractor receives notification of PQAPP approval from the Contract Level Contracting Officer's Representative (CL COR) via e-mail. The QA requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

In addition, the work plan shall not include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. NHSRC has a separate contract vehicle that handles 508 compliance across the Center within the Immediate Office rather than have each project and task include it in various contracts and work assignments. Deliverables which will be needed to be made 508 compliant as part of the option period will be designated as such in the task narrative and delivery table.

IV. DETAILED TASK DESCRIPTION:

All direction under this WA will be provided as written technical direction from the WACOR, Alternate or WACOR as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the CL COR and the Contracting Officer (CO), and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate WACOR/ review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

The contractor shall perform the following tasks:

The contractor shall perform the following tasks in support of SAM, SAM addendums, SAM compendiums, development and verification of selected analytical and sample collection procedures, development and maintenance of a interactive web site and method development/verification addressing SAM analytes that may include 1) chemical 2) biological 3) radiological and 4) biotoxins.

Task 0: Work Plan, Progress evaluations, and Monthly Progress Reports

The contractor shall develop a WP that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the work plan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at http://www.epa.gov/accessibility/. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a PQAPP, as noted above, and ensure the quality of primary and/or secondary data used to complete these tasks. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The WP shall explain when the PQAPP will be submitted based on the specific data requirements of the WA. Work on these tasks cannot proceed until the contractor receives notification of the new PQAPP approval from the CL COR via e-mail.

In each monthly progress report, the contractor shall, at the introduction to the discussion of this WA, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the WA. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing WA under this contract is not occurring.

Deliverables: Work plans, monthly progress and financial reports.

Task 1: Quality Assurance Project Plan (QAPP)

The contractor shall prepare a QAPP(s) in accordance with Quality Assurance (QA) Category B. Attachment 1 to this Performance Work Statement (PWS) provides information regarding **NHSRC QA Requirements/Definitions List.**

QAPPs prepared for a Category B project must be developed in accordance with the document titled "EPA Requirements for Quality Assurance Project Plans." EPA QA/R-5 can be found at https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf and QAPPS must be approved by an EPA Quality Assurance Manager (QAM) prior to the start of any literature searches (existing data), data collection, gathering, synthesizing, or data generation (laboratory) work.

At the discretion of the COR, Category B QAPP(s) can be either based on the R5 guidance (described above) or a project-specific QA requirements provided by the PI.

Additional information related to QA requirements can be found at www.epa.gov/quality.

The contractor must prepare Quality Assurance Project Plan(s) for approval by NHSRC. Work on NHSRC tasks cannot proceed until the contractor receives notification from the PO via e-mail that utilization of the QAPP is approved for use.

Deliverables: Quality Assurance Project Plan(s) (QAPP[s]).

Task 2: Selected Analytical Methods for Environmental Remediation and Recovery (SAM) application (website)

- Maintenance: The contractor shall maintain the current SAM application (website). The contractor shall provide application (website) maintenance and monitoring, including, but not limited to, checks of broken links, logging of comments and response to comments. The application (website) shall provide links as needed to SAM companion documents, analytical protocols, and sample collection plans or procedures.

- Searchability of Sample Collection Information Documents (SCID) in query tool: The contractor will develop a query tool to provide search capabilities of the revised SCID.

- Document Uploads: The contractor shall upload and make searchable the SAM 2017 document and newly revised SAM companion Sample Collection Information Documents (SCID) after revisions are complete. The Contractor shall upload newly developed SAM related sample collection procedures.

- The Contractor is requested to propose specific steps/activities necessary to achieve desired goals.

Deliverables: Functional interactive application (website) updated as directed by WACOR or Alternate WACOR

Task 3: Selected Analytical Methods for Environmental Remediation and Recovery (SAM)

The Contractor shall support NHSRC in the publishing of SAM 2017 and addendums as requested.

- SAM 2017: The Contractor shall support NHSRC in the updating and publishing of SAM 2017 as needed. The Contractor shall support the planning and execution of the 2017 revision including (but not limited to): preparing the document for the QA, tech edit and management reviews by collecting review comments, developing response to comment documentation for the QA review, resolution of comments with EPA WACOR/Alternate WACOR, prepare draft documents, prepare final 508 compliant document.

- Addendums: The Contractor shall support the planning and execution of each addendum including (but not limited to): develop the addendum, assist the EPA WACOR/Alternate WACOR with resolution of review comments as requested, prepare draft documents, prepare a final document, and post to the website. Addendums for both chemistry and radiochemistry methods will be possible for this option period.

Deliverables:

- SAM 2017: Final 508 Compliant document ready for publishing.
- Addenums: Final 508 Compliant documents ready for publishing as requested by WACOR or Alt-WACOR.

Task 4: SAM Companion Documents

The Contractor shall plan and execute, as requested, preparation of and /or updates to existing SAM related/companion documents. Document revision information may be generated during SAM 2017 workgroup sessions. This shall include, as applicable, up to 4 cycles of document review requiring

coordination, collection of comments, preparation of response to comment documents, resolution of comments with EPA WACOR/Alternate WACOR, and updating draft document based on received and accepted comments, and preparing final documents in support of, but not limited to, the below listed projects:

- The contractor shall provide support in the revision of the Laboratory Environmental Sample Disposal Information Document.

Deliverables: Final 508 compliant documents as requested by EPA.

Task 5: Technical Support for SAM Chemical and Radiochemical Procedures and Protocols.

The Contractor shall provide technical support for work related to chemical and radiochemical SAM products. This shall include (but not limited to) the development of, guidance documents, sample collection documents; preparation of comment/response documentation; participation in meetings and related meeting documentation; preparation of presentation and meeting materials in support of, but not limited to, the below listed projects:

- The contractor shall provide support in the development of the radiological sampling strategy document for building materials.

- The contractor shall provide support in the revision of the Sample Collection Procedures for Radiochemical Analytes in Environmental Matrices (2012 revision) to match information in SAM 2017 and add information that was put into the sample collection procedure for building materials.

Deliverables: See Section V

Task 6: Technical Support for Microbial Data Usability MicroSAP Companion Document:

The contractor shall provide technical support in the revision of the draft Microbial Data Usability Tool Companion Document, Sampling, Laboratory, and Data Reduction Considerations for Microbial Data Collected in the Field. This document summarizes considerations for planning, implementing, and assessing environmental microbial data collected from the field in order to ensure that the data collected is of known and sufficient quality for the intended purpose. The document covers considerations for sampling, analysis, and interpretation of samples and is in need of revision and updates.

- The Contractor shall plan and execute, as requested, revision and update of the Microbial Data Usability Tool companion document. This might also include addition of further resources and information to the document as needed.
- Content revisions will be determined by the EPA WAM based on information generated by the workgroup.
- After approval of the workgroup, the companion document will undergo, as applicable, up to 4 cycles of document review requiring coordination, collection of comments, preparation of response to comment documents, resolution of comments with EPA WAM/Alternate WAM, and updating the draft document based on received and accepted comments, and preparing final documents.

Deliverables: See Section V

Task 7: Technical Support for SAM Companion Document: Biological Sample Collection Procedure

The Contractor shall provide technical support for work related to biological SAM products. This will include (but not limited to) the development of sample collection documents; preparation of comment/response documentation; participation in meetings and related meeting documentation; preparation of presentation and meeting materials in support of developing sample collection procedures for pathogens.

Deliverables: See Section V

V. SCHEDULE/DELIVERABLES

Task	Deliverable	Due date
0	**Monthly Report**	Per contract requirements
1	**QAPP**	Revise/Draft 30 days after contract award, updated as necessary thereafter.
2	**SAM Application (web site)** Application: SCID Searchability: Modified SAM Query tool to search SCIDs Document Uploads:	 Updated upon EPA request*, updated for a new revision of SAM with 30 days of SAM being published. Determined when requested by EPA* Determined when requested by EPA*
3	**SAM Revision** SAM 2017: Final 508 Compliant document.	 Final document by October 31, 2017
4	**SAM Companion Documents** Chemistry/Radiochemistry/Biotoxin: SCID Final 508 Compliant document Pathogen SCID: Final 508 Compliant document	 Final document by October 31, 2017 Final document by October 31, 2017
5	**Chemical and Radiochemical SAM products and SAM methods** Sample collection strategy procedure for building materials: Final 508 Compliant document Revised Sample Collection Procedure for Environmental Matrices: Final 508 Compliant document	 Determined when requested by EPA* . Determined when requested by EPA* .
6	**Microbial Data Usability MicroSAP Companion Document** Final 508 Compliant document	 Final document by July 31, 2018
7	**Biological Sample Collection Procedure** Final 508 Compliant document: sample collection procedure/protocols for pathogens.	 Final document by July 31, 2018

* EPA will determine a schedule for delivery of a document/web update at the time of request the date will be provided through written technical direction

VI. REPORTING REQUIREMENTS

- Monthly Progress Reports (including a progress evaluation discussion)
- Financial Reports
- Project Specific PQAPP (if applicable)

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, Acquisition of environmentally preferable meeting and conference services (May 2007), for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05. AND the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated $20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare for approval the internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Any event which meets the definition of a "conference," with total net expenditures greater than $20,000, is required to submit EPA Electronic Form 5170 and Form 5170-A (with cost estimates/actuals). In the case the workflow system is down and CORs require emergency approval, they can submit EPA Form 5170 (PDF) (2pp, 93K) (with cost estimates) to conference@epa.gov.

IX. SOFTWARE APPLICATION AND ACCESSIBILITY (SECTION 508 REHABILITATION ACT AND AMENDMENTS)

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The WACOR shall identify which of delivered products will require 508 compliance.

QUALITY ASSURANCE SURVEILLANCE PLAN
for WSD's Mission Support

Quality Assurance Surveillance Plan

The requirements contained in this WA are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards in Attachment 4 of the contract. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The WACOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the CLCOR in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

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(4) the background and experience of the QA personnel who will be assigned to the project; and

(5) the organization's general approach for accomplishing the QA specifications in the SOW.

NHSRC QA Requirements/Definitions List

Category Level Designations (determines the level of QA required):

☐ **Category A Project (formerly Category 1 and 2)** – applies to research that is anticipated to result in high-visibility products. In this case, the QAPP shall address all elements listed in "EPA Requirements for QA Project Plans, EPA QA/R-5. **http://www.epa.gov/quality/qs-docs/r5-final.pdf**

Research of this nature meets one or more of the following criteria:

- Results are ISI
- Has a high probability the results could be used in litigation or enforcement
- Is a HISA
- Direct regulatory support

☐ **Category B Project (formerly Category 3 and 4)** - applicable to projects that do not meet the criteria for Category A. In lieu of using "EPA Requirements for QA Project Plans, EPA QA/R-5, a QAPP may be developed in accordance with NHSRC's QAPP requirement templates. This decision is made by the Principal Investigator or lead researcher.

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Additional information regarding Q**APP** requirements for a specific project type are provided below.

Project Types:

NHSRC's QAPP Requirements templates are available for Applied Research Projects, Sampling and analysis Project, Method Development Project, and Existing Data Project. These templates are condensed from applicable sections of R-5 (EPA Requirements for QA Project Plans) and are intended to serve as a starting point when preparing a QAPP. These templates and their format may not fit every research scenario and QAPP's must conform to applicable sections of R-5 in a way that fully describes the research plan and appropriate QA and QC measures to ensure that the data are of adequate quality and quantity to fit their intended purpose.

☐ **Applied Research Project** - pertains to a study performed to generate data to demonstrate the performance of accepted processes or technologies under defined conditions. These studies are often pilot- or field-scale.

☐ **Sampling and Analysis Project** - pertains to the collection and analysis of samples with no objectives other than to provide characterization or monitoring information.

☐ **Existing Data Project** - pertains to environmental data collected from other sources, by or for EPA, that are used for purposes other than those originally intended. Sources may include: literature, industry surveys, compilations from computerized databases and information systems, and computerized or mathematical models of environmental processes.

☐ **Method Development Project** - pertains to situations where there is no existing standard method, or a standard method needs to be significantly modified for a specific application.

For other types of project types, the EPA Guidance documents are available. All QAPPs must conform to applicable sections of R-5 in a way that fully describes the research plan and appropriate QA and QC measures to ensure that the data are of adequate quality and quantity to fit their intended purpose. The specific and general guidance documents can be found at http://www.epa.gov/quality/qa_docs.html#guidance

☐ **Design, Construction, and/or Operation of Environmental Technology Project** - pertains to environmental technology designed, constructed and/or operated by and/or for EPA. The QAPP shall address requirements in the EPA Quality System document "Guidance on Quality Assurance for Environmental Technology Design, Construction, and Operation" (EPA QA/G-11)

☐ **Geospatial Data Quality Assurance Project** - pertains to data collection; data processing and analysis; and data validation of geospatial applications. The QAPP shall address requirements in the EPA Quality System document "Guidance for Geospatial Data Quality Assurance Project Plans" EPA QA /G-5S).

☐ **Model Development Project** - includes all types of mathematical models including static, dynamic, deterministic, stochastic, mechanistic, empirical, etc. The QAPP shall address requirements in the EPA Quality System document "Guidance for Quality Assurance Project Plans for Modeling" (EPA QA/G-5M)

Definitions:

Environmental Data - These are any measurement or information that describe environmental processes, location, or conditions; ecological or health effects directly from measurements, produced from software and models, and compiled from other sources such as data bases or the literature. For EPA, environmental data include information collected directly from measurements, produced from software and models, and compiled from other sources such as data bases or literature.

Incremental Funding - Incremental funding is partial funding, no new work.

Quality Assurance (QA) - Quality assurance is a system of management activities to ensure that a process, item, or service is of the type and quality needed by the customer. It deals with setting policy and running an administrative system of management controls that cover planning, implementation, and review of data collection activities and the use of data in decision making. Quality assurance is just one part of a quality system.

Quality Assurance Project Plan (QAPP) - A QAPP is a document that describes the necessary quality assurance, quality control, and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A QAPP documents project-specific information.

Quality Control (QC) - Quality control is a technical function that includes all the scientific precautions, such as calibrations and duplications, which are needed to acquire data of known and adequate quality.

Quality Management Plan (QMP) - A QMP is a document that describes an organization's/program's quality system in terms of the organizational structure, policy and procedures, functional responsibilities of management and staff, lines of authority, and required interfaces for those planning, implementing, documenting, and assessing all activities conducted. A QMP documents the overall organization/program, and is primarily applicable to multi-year, multi-project efforts. An organization's/program's QMP shall address all elements listed in the "Requirements for Quality Management Plans" in Appendix B of the NHSRC QMP.

Quality System - A quality system is the means by which an organization manages its quality aspects in a systematic, organized manner and provides a framework for planning, implementing, and assessing work performed by an organization and for carrying out required quality assurance and quality control activities.

R-2. EPA Requirements for Quality Management Plans (EPA/240/B-01/002) March, 2001
http://www.epa.gov/quality/qs-docs/r2-final.pdf

R-5. EPA Requirements for Quality Management Plans (EPA/240/B-01/002) March, 2001
http://www.epa.gov/quality/qs-docs/r5-final.pdf

Substantive Change - Substantive change is any change in an activity that may alter the quality of data being used, generated, or gathered.

Principal Investigator (PI) - This person is technically responsible for the project. For extramural contract work, the PI is typically the contracting officer's representative (COR). For intramural work, the lead researcher is typically the Principal Investigator.

Abbreviations:

COR	Contracting Officer's Representative	IAG	Interagency Agreement
NHSRC	National Homeland Security Research Center	QA	Quality Assurance
QA ID	Quality Assurance Identification	QAM	Quality Assurance Manager
QAPP	Quality Assurance Project Plan	QMP	Quality Management Plan
QS	Quality System	SOW	Statement of Work
PI	Principal Investigator	CRADA	Cooperative Research & Development Agreement

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-13

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Security Program Assess & Rev

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.1, 2.3, 2.4, 2.5, 2.14

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
In accordance with Clause B.1 immediate start is authorized for the subject work assignment. If the work plan is not approved within 35 days after receipt of the work plan the contractor shall stop work.

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*): ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee	LOE
Contract Period: 08/01/2015 To 07/31/2018		0
This Action:		1,350
Total:		1,350

Work Plan / Cost Estimate Approvals

	Cost/Fee	LOE
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Kenneth Stone (Signature) (Date)		Branch/Mail Code: Phone Number: 513-569-7474 FAX Number:
Project Officer Name: Nancy Parrotta (Signature) (Date)		Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name (Signature) (Date)		Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart Donna Reinhart (Signature)	11/21/17 (Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

PERFORMANCE WORK STATEMENT
CSRA EP-C-15-012
Work Assignment No. 02-13
Period of Performance: Effective date through July 31, 2018

I. ADMINISTRATIVE:

A. Title: Security Program Assessment & Review (SPAR)

B. Work Assignment Contracting Officer's Representative (WACOR):

Kenneth R Stone
National Homeland Security Research Center ORD (NG16)
26 Martin Luther King Blvd
Cincinnati, Ohio 45230
513-569-7474
stone.kenneth@epa.gov

Alternate WACOR:

Franz B Ott
Office if Administration & Resources Management (253MLK)
26 Martin Luther King Blvd
Cincinnati, Ohio 45230
513-569-7171
ott.franz@epa.gov

C. Quality Assurance:

The tasks in this work assignment do not require environmental measurements. Consistent with the Agency's quality assurance (QA) requirements, the contractor does not need to supplement the Contract Level Quality Assurance Project Plan (QAPP) or to prepare a Project-Specific Quality Assurance project Plan (PQAPP).

D. Background:

The NHSRC is charged with handling and securing classified information. The purpose of the NHSRC INFOSEC program is to ensure that such information is quickly identified and controlled to prevent release to parties that may exploit it for harm to the American people. This mission is accomplished through the early identification of sensitive information under the RASP, the correct marking of such information for controlled utilization by researchers, partners and clients and the safeguarding at the appropriate level information that possesses the risk of harm to persons, programs, missions or National Security.

II. OBJECTIVE:

The purpose of this work assignment is to support the National Homeland Security Research Center's (NHSRC) Information Security (INFOSEC) program to ensure the security of NHSRC information.

To achieve this purpose the contractor shall be expected to: (1) provide services to conduct Risk Assessed Security Program (RASP) reviews of NHSRC research products to determine the sensitivity of information they contain; (2) make recommendations for designation as unclassified or unclassified/FOUO, as appropriate; (3) make recommendations for the classification of National Security Information (NSI), as appropriate (The contractor shall be

supplied with Agency classification guidance for this purpose.); (4) provide portion marking and classification justifications derived from Agency classification guidance; (5) support updates and revisions to classification guidance and provide guidance memoranda by project as directed.

This project supports programmatic support needs related to our national all hazards homeland security responsibilities by meeting NHSRC/ORD requirements under the Presidential Policy Directive/PPD-21, Critical Infrastructure Security and Resilience, and the Executive Order 13526, Classification of National Security Information.

This work will be completed commensurate with Sections 2.1, 2.3, 2.4, 2.5 and 2.14 of the Contract Level PWS. The level of effort estimated for this work assignment is 1,350 hours.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 - Work Plan Submission:
The contractor shall develop a WP that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the WP shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract Level QMP is not required.

In each monthly progress report, the contractor shall, at the introduction to the discussion of this WA, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the WA. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing WA under this contract is not occurring.

Deliverables: Work plan and monthly progress and financial reports.

Task 1 – Designated Review Authority
The contractor shall be designated as a review authority (DRA) for research products developed by the NHSRC. In this role, the contractor shall utilize the NHSRC Security Classification Guidance (SCG) provided by the EPA WACOR to assess the sensitivity of information in draft NHSRC products and provide a rating, along with a justification for any rating that entails a restriction in distribution or prohibition of release. Justifications must cite a legal requirement and be based on the SCG or other Federal classification guides issued by a cognizant authority. The types of products requiring a sensitivity review may include: articles

and papers, slide presentations, speeches, abstracts, brochures, reports, proceedings, computer tools and poster displays. Topical areas shall include:

A) Threat evaluation and infrastructure vulnerability assessment and;

B) Chemical and biological agent research, including, but not limited to;
   i. Simulants and synthetic toxins
   ii. Detection technology, assessment and evaluation
   iii. Modeling and Dispersal
   iv. Emergency Response Actions
   v. Decontamination
   vi. Disposal

C) Radiological agent research, including, but not limited to;
   vii. Detection technology, assessment and evaluation
   viii. Modeling and Dispersal
   ix. Emergency Response Actions
   x. Decontamination
   xi. Disposal

Documents submitted for review shall be uploaded to the Security Drop Box on the NHSRC Intranet by the EPA author or PI. Upon receiving automated notification of the upload, the contractor shall access the submission and conduct the security review, issue a rating and justification as indicated on the form and electronically sign the review.

NHSRC research products will be reviewed individually to determine the level of sensitivity, resulting in a recommendation to either designate the product, Unclassified, or For Official Use Only (FOUO), or to classify it as NSI, CONFIDENTIAL or SECRET.

The contractor shall review and recommend designation or classification of research products in accordance with the guidance laid down in the NHSRC SCG. These products shall include abstracts, papers, articles, project summaries, reports, slides and slideshows, brochures, one-pagers, posters, computer products. Tasks will include the following:

Evaluating every component of a product in accordance with the requirements set down in EO 13596 and recommending designation or classification of the product to the NHSRC.

(1) In the case of a recommendation of UNCLASSIFIED, the contractor shall simply make the recommendation and sign the review form without comment.

(2) In the case of a FOUO (For Official Use Only), designation, the contractor shall page-mark the product in accordance with accepted practice, utilizing the markings stipulated in the SCG. The contractor shall cite the relevant topic in the draft manual, and provide an assessment of why the product fulfills the topic description.

(3) In the case of a CONFIDENTIAL or SECRET classification recommendation, the contractor shall portion-mark the product in accordance with accepted practice, utilizing the portion-markings stipulated in the SCG. The contractor shall mark the cover of the document and the specific pages on which the information appears according to government requirements as temporary classification, pending NHSRC review and authorization. These markings shall also include the statement, "Classification Determination Pending," on the cover, title and all pages containing sensitive information.

(4) The contractor shall deliver designation/classification recommendations and marked products to the NHSRC within 3 working days.

The DRA is a critical function as a failure to properly identify the potential National Security risk can lead to situations incurring significant civilian casualties.

In this security area, there is no room for compromise. Proper identification and assessment of risk for NHSRC research information enables NHSRC to quickly secure and control FOUO, CUI and NSI, preventing the release of such dangerous information to our adversaries. Should we fail to identify such information early in the research process, the cost incurred will be measured in lives lost, mission impacted and reputation damaged.

In sum, each individual provided by the contractor to act as a DRA must possess:

(1) National Security Clearance at SECRET level or above,

(2) Expertise in classifying NSI, and

(3) Scientific knowledge to recognize the emergence of NSI in research efforts on chemical, biological and radiological attack agents.

Therefore, for each individual submitted for designation as a DRA, the contractor shall provide in the workplan a CV, resume or other record of work expertise that demonstrates all of the following:

1. Possession of a National Security Clearance at SECRET level or above

2. Expertise in the field of information classification, as either a derivative classification authority (DCA) or Original Classification Authority (OCA)

3. Expertise in threat evaluation and infrastructure vulnerability assessment

4. Expertise in these technical areas (either as a researcher or as a DCA or OCA):

    i. Chemical and biological agents, including, but not limited to;
        A) Chemical and biological simulants and synthetic toxins
        B) Weaponizing agents and delivery methods

C) Detection technology, assessment and evaluation
D) Modeling and Dispersal
E) Emergency Response Actions
F) Decontamination
G) Disposal

ii. Radiological agent research, including, but not limited to;
H) Weaponizing agents and delivery methods
I) Detection technology, assessment and evaluation
J) Modeling and Dispersal
K) Emergency Response Actions
L) Decontamination
M) Disposal

Deliverables: RASP reviews, via Security Drop Box, for each product assigned, portion-marked products (as appropriate).

Estimate Annual Number of Product Designation/Classification Reviews	
ABSTRACTS	30
PAPERS/ARTICLES	30
SLIDESHOWS	40
POSTERS	15
REPORTS/TEST PLANS	50

Task 2 – NHSRC INFOSEC Program Support

The contractor shall support the planning, development and implementation of internal reviews, including classification, markings and assessments of the NHSRC INFOSEC program. These assessments will address any aspect of the INFOSEC program, as directed by the NHSRC Security Program through written technical direction. The contractor shall assist in planning sessions to assess operations and conduct walk-throughs of NHSRC sites to assist in the evaluation of security procedures. The contractor shall review classified inventory and assist in the cataloging, management, safeguarding and disposition of classified matter. As program changes are identified, the contractor shall assist in implementing those changes via documentary support.

It is envisioned that the contractor shall make two site visits to the Cincinnati office, NHSRC.

Deliverables: Program support activities, estimated annual requirement.

Estimate Annual Number of Internal Reviews, Assessments and Inspections	
Internal Reviews	1
Assessments	1

IV. SCHEDULE OF DELIVERABLES:

Specific deliverables, by Task, are detailed in the table below. All work will be determined by technical direction.

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0 - Workplan Submission		
Workplan and budget		According to contract
Monthly progress reports		Monthly
Task 1 – Designated Review Authority		
RASP Reviews		95% due same day. 5% due 3 days after issue.
Task 2 - NHSRC INFOSEC Program Support		
Internal Review & Assessment		Immediately upon completion

V. MISCELLANEOUS:

Software Application Files and Accessibility:
Software application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The EPA WACOR shall identify which of delivered products will require 508 compliance.

VI. TRAVEL

The contractor shall anticipate two (2) contractor trips to NHSRC in Cincinnati in support of this WA over the duration of the performance period. Travel will be directly related to the scope of this Work Assignment and support advancement of the work under Task 2.

VII. MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than $20,000, shall be obtained by the EPA CL-COR as needed and provided to the Contracting Officer (CO). Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL-COR.

VIII. CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, CL-COR and/or WACOR.

IX. PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

X. Technical Direction

The Contract level COR or an authorized individual is permitted to provide technical direction. Technical direction must be within the statement of work of the contract and includes: (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work, (2) Comments on and approval of reports or other deliverables. Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the Contract Level Contracting Officer Representative.

XI. QUALITY ASSURANCE SURVEILLANCE PLAN:

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-14

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Great Lakes Program Office Sup

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.0

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2017

Comments:
In accordance with clause B.1 immediate start is authorized for this work assignment beginning on August 1, 2017. If the work plan is not approved within 35 calendar days after receipt of the work plan, the contractor shall stop work.

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period: 08/01/2015 To 07/31/2018 — Cost/Fee: — LOE:

This Action:

Total:

Work Plan / Cost Estimate Approvals

Contractor WP Dated: — Cost/Fee — LOE:

Cumulative Approved: — Cost/Fee — LOE:

Work Assignment Manager Name: Louis Blume (Signature) (Date)	Branch/Mail Code: Phone Number: 312-353-2317 FAX Number:
Project Officer Name: Nancy Parrotta (Signature) (Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name: (Signature) (Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart DONNA REINHART (Signature) (Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

Digitally signed by DONNA REINHART
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546
Date: 2017.07.25 15:16:42 -04'00'

PERFORMANCE WORK STATEMENT
CSRA EP-C-15-012
Work Assignment No. 02-14
Period of Performance: 8/1/17-7/31/18

I. ADMINISTRATIVE:

A. Title: Support to EPA's Great Lakes National Program Office

B. Work Assignment Manager:
Louis Blume

Great Lakes National Program Office
(GLNPO)
77 West Jackson Boulevard (MC: G-9J)
Chicago, IL 60604
312-353-2317
blume.louis@epa.gov

Alternate Work Assignment Manager:
Eric Osantowski

Great Lakes National Program Office
(GLNPO)
77 West Jackson Boulevard (MC: G-9J)
Chicago, IL 60604
312-353-1373
osantowski.eric@epa.gov

Louis Blume serves as the WACOR and Dr. Eric Osantowski serves as the Alternate WACOR. There are 3 Task Managers including 1) Elizabeth Murphy for the Great Lakes Fish Monitoring and Surveillance Program, 2) Dr. Eric Osantowski for the Biology and Limnology Programs, and 3) Dr. Thomas Kevin O'Donnell for the Coastal Wetlands Monitoring Program. Technical Direction for all programs will be provided by the WACOR.

Contract PWS Paragraph: 2.0

C. Quality Assurance:

Tasks 1, 2, 3, 4, and 5 in this work assignment require quality assurance (QA). Collection, use and analysis of data will be identical to the procedures described in the Project-Specific Quality Assurance Project Plan (PQAPP) completed under tasks 1, 2, 3, 4, and 5 of WA 01-14, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

D. Background:

The GLNPO was created in 1978 to fulfill the United States' obligation under the Great Lakes Water Quality Agreement with Canada. Since inception, additional responsibilities for GLNPO have been defined in Section 118 of the Clean Water Act, Section 112 of the Clean Air Act Amendments, and the Great Lakes Critical Programs Act of 1990. Within EPA, GLNPO is responsible for monitoring the condition of the waters of the Great Lakes and working to protect and restore the integrity of the nation's Great Lakes water resources, which serve as critical source waters for drinking water systems, and are a unique and symbolic national treasure that cross our national borders. GLNPO is a geographically-focused office, whose mission is to lead and coordinate United States efforts to protect and restore the Great Lakes. GLNPO's responsibilities include:

- Overseeing fulfillment of EPA's international commitments under the U.S.-Canada Great Lakes Water Quality Agreement
- Monitoring lake ecosystem indicators
- Managing and providing public access to Great Lakes data
- Helping communities address contaminated sediments in their harbors
- Supporting local protection and restoration of important habitats
- Promoting pollution prevention through activities and projects such as the U.S.-Canada Great Lakes Bi-national Toxics Strategy
- Providing assistance for community-based Remedial Action Plans for Areas of Concern and for Lake-wide Management Plans

GLNPO administers ongoing monitoring programs, conducts special studies to address new impacts of concern, implements sediment assessment and remediation activities, and is involved in several large scale cooperative studies. GLNPO assists Great Lakes partners (including federal, state, tribal, local, educational, and industry organizations) in these areas through technical assistance and coordination, as well as grants, interagency agreements, and contracts.

GLNPO has primary responsibility within the U.S. for conducting surveillance monitoring of the offshore waters of the Great Lakes. This monitoring is intended to fulfill provisions of the Great Lakes Water Quality Agreement (International Joint Commission, 1978) calling for periodic monitoring of the lakes to: 1) assess compliance with jurisdictional control requirements; 2) provide information on non-achievement of agreed-upon water quality objectives; 3) evaluate water quality trends over time; and 4) identify emerging problems in the Great Lakes Basin Ecosystem. GLNPO's base monitoring program involves semi-annual Water Quality Surveys of all five lakes to meet the surveillance monitoring requirements. Each summer GLNPO also conducts an intensive survey of dissolve oxygen (DO) concentrations in Lake Erie. GLNPO also oversees the Great Lakes Fish Monitoring Program to measure the contaminant levels of various organic substances in lake trout in the Great Lakes ecosystem. GLNPO has ongoing monitoring programs, conducts special studies to address new impacts of concern, and is involved in several large scale cooperative studies including a lake-wide pollutant modeling study, the Lake Michigan Mass Balance Study.

II. OBJECTIVE:

The purpose of this work assignment is to provide support to the U.S. Environmental Protection Agency's (EPA) Great Lakes National Program Office (GLNPO) in its efforts to: develop and implement GLNPO's Quality program; design, implement, interpret and report on environmental monitoring programs and special studies; and support its mission to lead and coordinate United States efforts to protect and restore the Great Lakes. The contractor shall provide quality management, scientific, data management, and technical support to review, plan, document, conduct, and report on environmental monitoring projects and other studies administered by GLNPO.

The contractor shall provide quality management, scientific, data management, modeling, and technical support to review, plan, document, conduct, interpret, track, and report on environmental monitoring projects and other studies for EPA review and decision.
The Contractor is tasked with supporting the design and implementation of environmental monitoring projects and other studies from the planning to the reporting stages. Contractor activities provide support to a variety of programs at GLNPO including the Great Lakes Fish Monitoring and Surveillance Program, the Water Quality Survey of the Great Lakes Limnology and Biology programs, the Coastal Wetland Monitoring Program, and the Information Management Program. Specifically, the contractor shall:

- Support implementation of GLNPO's Quality Management program including developing and implementing tools to inventory, track, assess, and report on project planning and quality documentation for GLNPO projects and reviewing and assessing the quality of environmental monitoring data

- Maintain and operate existing information management systems data management systems

- Research, evaluate, develop, and implement sampling and analysis procedures to support environmental monitoring projects

- Conduct statistical and geostatistical data analysis and interpretation and develop and apply environmental models including applying GIS and visualization tools to describe, evaluate, interpret, and present environmental conditions and information

- Develop, maintain, evaluate, refine and apply scientific models to assess, describe, and evaluate ecosystems while accounting for the sources, sinks, transport, fate, and effects of stressors, based upon the principle of conservation of mass, energy, and momentum

- Support model development and maintenance, debugging, compiling, database integration, systems integration and automation, model calibration, and integration with visualization and graphic presentation

- Calculate environmental metrics, such as total maximum daily loads, that facilitate assessment, evaluation, and interpretation of environmental data and environmental monitoring scenarios

- Develop, test, validate, archive and document revised and new models

- Use ecosystem scale modeling approaches to provide an integrated and synthetic picture of the system to facilitate establishment of regulatory and remedial priorities with both local and lake-wide perspectives

- Develop technical, quality assurance and scientific reports, web content, presentations, and outreach materials on environmental monitoring projects, programs, and other studies

- Provide scientific, technical, analytical, and administrative support for programmatic projects and initiatives; develop and implement tools for tracking, documenting, archiving, and presenting program information

- Coordinate, support, attend and present at meetings, workgroups, and conferences on environmental monitoring projects, modeling efforts, statistical analyses, quality management, and other aspects of environmental studies

All of the above general areas of support are to provide technical assistance to the EPA in their decision making process. The contractor shall further support EPA through the specific tasks described in detail under Section IV of this work assignment.

This work assignment provides quality management, scientific, data management, modeling, and technical support to review, plan, document, conduct, interpret, track, and report on environmental monitoring projects and other studies. The Great Lakes - Superior, Michigan, Huron, Erie, and Ontario - form the largest surface freshwater system on the Earth. More than 30 million people live in the Great Lakes basin, and the daily activities of these people, from the water consumed to the waste returned, directly affects the Great Lakes environment. This work assignment supports GLNPO activities in protecting and restoring the nation's drinking water, in being informed, coordinated and prepared to prevent, detect, respond to and recover from attacks and natural disasters. This work assignment also supports international commitments such as the bi-national waterway strategies with Canada.

In support of these requirements, this contract supports the nation's drinking and wastewater infrastructure, collectively known as the Water Sector, in being informed, coordinated, and prepared to prevent, detect, respond to, and recover from terrorist attack and other intentional acts, natural disasters, and other hazards (referred to as the "all hazards' approach), which may also occur, including the needs and challenges posed by natural disasters, catastrophic events, adaptation and impacts of climate change, floods, earthquakes, pandemic illness, and any other events which impact the safety and availability of our water supply.

In pursuit of these efforts, the contractor may be tasked with preparing a correlation summary comparing the results under this work assignment to the components of the Water Security Strategy framework.

This work will be completed commensurate with Sections 3.2 and 3.4 of the Contract Level PWS.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 - Work Plan, Progress evaluations, and Monthly Progress Reports
The contractor shall prepare a detailed work plan and budget for the accomplishment of the indicated tasks in accordance with the clause Work Assignments (EPAAR 1552.211-74). The

work plan shall include a description of (a) proposed staff, (b) the number of hours and labor classifications proposed for each task, broken down to task level, to include both prime contractor and subcontractor labor, and (c) a list of deliverables, with due dates and schedule for deliverables.

In addition, the work plan shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract Level Quality Assurance Project Plan (QAPP) or a Project-Specific Quality Assurance Project Plan (PQAPP) is not required.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 1-14. This task also includes monthly progress and financial reports, which are to be submitted pursuant to Attachment 2 of the contract. Monthly financial reports must include a table with the invoice level of effort (LOE) and costs broken out by the tasks in this WA. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The contractor shall immediately notify the EPA Contract Level Contracting Officer's representative (CLCOR) and EPA Work Assignment Contracting Officer's Representative (WACOR) if any changes to the collection and analysis of the data is needed and prepare a PQAPP accordingly.

The contractor shall immediately alert the EPA WACOR to any anticipated event under the work assignment which may result in incurring an estimated $20,000 or more cost, funded by EPA, specific to that event (e.g., meeting or training). Those costs would include travel of prime and consultant personnel, planning and facilitation costs, audio/visual, and rental of venue costs. The EPA WACOR will prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Deliverables: Work plan, revised versions of PQAPPs, monthly progress and financial reports.

Task 1 - Scientific, Statistical, Visualization, and Quality Assurance Support to EPA's Great Lakes National Program Office - Quality Management Support

The contractor shall support implementation of GLNPO's Quality Management program including developing and implementing tools to inventory, track, assess, and report on project planning and quality documentation for GLNPO projects as indicated by written technical direction provided by the WACOR. The contractor shall assist EPA with reviewing, evaluating, and implementing EPA Quality Policy directives, guidance documents and other supporting materials. The contractor shall provide quality management support to the Great Lakes Fish Monitoring and Surveillance Program, the Water Quality Survey of the Great Lakes, and the Great Lakes Legacy Act Program, as well as other environmental monitoring programs and special studies. The contractor shall provide quality support to plan, document, conduct, evaluate, and report on environmental monitoring programs. Specific activities include:

- Conduct literature searches in support of the design of monitoring programs, interpretation of study data, and development of QA assessment parameters including

data quality objectives
- Review and assess EPA Quality Policy initiatives, implementation and guidance materials
- Assist in the development and revision of quality system documentation
- Develop and implement procedures and checklists to review quality system documentation
- Develop and implement tools to inventory, track, assess, and report on project planning and quality documentation for GLNPO projects
- Provide standard reports on quality system documentation status for all GLNPO funded projects
- Evaluate sampling, analytical, and geospatial data reporting standards, data reporting forms, and supporting documentation
- Conduct data verification, data quality assessments, and data usability assessments and provide reports presenting the results of the reviews
- Develop, evaluate and implement statistical analyses in support of data quality assessments; create and maintain all supporting statistical programs
- Prepare QA reports for environmental monitoring and other study data
- Provide technical support for conducting on-site field or laboratory audits of EPA field contractors and contractor grantee laboratories and the laboratory aboard the Research Vessel Lake Guardian
- Provide technical and quality management support to review reports, journal articles, and related documents
- Provide general technical and quality assurance support to plan, document, and implement monitoring programs and other special studies

As directed by the EPA WACOR, the contractor shall assist EPA in conducting or coordinating peer reviews of program methodology, strategies, methods, and protocols or other products related to this work assignment task. When coordinating reviews of study plans, protocols, methods, or third-party data (e.g., journals, grey literature, non-EPA databases, etc.), the contractor shall focus on determining the applicability of plans to specific EPA needs and shall make any appropriate recommendations to the EPA WACOR concerning their use in present form or with suggested modifications. The contractor shall ensure that in-house reviews are performed by qualified staff, and shall contact the author(s) of the subject materials to obtain additional information or clarifications about the material when such information is necessary to render a complete review.

The contractor shall provide or coordinate independent review of program methodology, strategies, methods, and protocols or other products related to this work assignment task as provided by written technical direction from the EPA WACOR. The contractor shall ensure that these independent reviews are conducted by technically qualified, independent reviewers in accordance with EPA's policy on peer review as outlined in EPA's Science Policy Council Handbook on Peer Review. In this effort, the contractor may identify and consult with experts in the specific area of interest to EPA.

Deliverables: Quality system documentation reviews in standardized formats, standard reports on quality system documentation status for all GLNPO funded projects, monthly status reports

on quality system documentation, data quality assessment reports in standardized formats, audit checklists and other materials in support of field and laboratory audits, reports on field and laboratory audits, project-specific quality assurance reports, and technical support for conducting on-site field and laboratory audits. We estimate approximately 20-30 project level quality plan reviews along with 15-20 data package reviews. Specific details on expectations of reviews is defined above and in the specific work assignment quality documents (previously approved).

Task 2 - Information Management Support

The contractor shall maintain and operate existing information management systems to efficiently, securely, and systematically gather, store, and manipulate a variety of technical, environmental, statistical, scientific, quality, and laboratory information related to Great Lakes protection, characterization, evaluation, and remedial activities. The contractor shall assist EPA in planning and implementing information management systems based on detailed evaluation of existing systems, including expanding existing systems where appropriate. Please consider use of Agile Development approaches or methodology wherever applicable consistent with EPA's Office of Environmental Information (OEI) directives.

Specific activities include:

- Develop, document, and implement sampling, analytical, and geospatial data reporting standards, data reporting forms, and supporting documentation
- Maintain and operate existing information management systems
- Develop and implement standardized evaluation of data submittals against requirements of study databases and provide standard reports on results of the evaluation
- Convert hardcopy and electronic field and analytical data into complete electronic files compliant with specific data standards including the Great Lakes Environmental Database and the Great Lakes Sediment Database (GLSED)
- Update databases with incoming data and revised data submissions and track updates
- Assist with input, maintenance, retrieval, analysis, reporting, and reformatting/integration and normalization of environmental data from EPA databases

Deliverables: Maintenance and operation of existing information management systems; processing submitted data into EPA standard formats, such as the Great Lakes Environmental Database (GLENDA) Standard; standard reports on data submission evaluation; providing assistance to GLNPO on uploading datasets so they are publicly available through agency CDX and WQX connections; assisting the GLNPO Great Lakes Fish Monitoring and Surveillance Program (GLFMSP) with database queries that allow easy access by GLNPO and GLRI associated scientists and maintains a historical version controlled record for eventual public dissemination; assist the GLNPO Open Lake Limnology Monitoring Program with database queries that allow easy access by GLNPO and GLRI associated scientists and maintains a historical version controlled record for eventual public dissemination.

Task 3: Sampling and Analytical Support

The contractor shall provide sampling, analytical, and technical support to plan, document, and implement environmental monitoring projects and other special studies. This support will include assistance and guidance in designing monitoring programs and studies to characterize the frequency and occurrence of chemical and biological contaminants. As necessary, the contractor also shall conduct evaluations of the scientific literature and consult with subject experts to identify candidate or alternate design strategies and assist EPA in developing a comprehensive understanding and definition of sampling and analysis goals (such as data quality objectives). The contractor shall assist EPA in the development of statistically based sampling designs to accomplish these goals. The contractor also shall assist EPA in coordinating and implementing sampling efforts. This support shall include the developing, assembling, and distributing sampling kits and providing technical support to field sampling teams and laboratory personnel as directed by the EPA WACOR. The contractor shall provide such support to meet the specific programmatic needs of the Great Lakes program, including coordinating laboratory analysis with laboratories operating under contracts or grants with either EPA or with state partners in the Great Lakes basin. This may include support for studies on water, fish, and sediments from the open lakes or tributaries, bays, lagoons, point sources, atmospheric and other vectors that flow into the lakes. In performing these activities, the contractor shall subcontract with qualified, experienced laboratories in accordance with all applicable EPA and Federal Acquisition Regulations, if necessary.

Provide support to GLNPO for program coordination, monitoring, evaluation, and execution. Specific activities include:

- Research, evaluate, develop, and implement sampling and analysis procedures to support environmental monitoring projects including all aspects of the Water Quality Survey and nearshore characterization using TRIAXUS towed undulator and associated instrumentation
- Develop, evaluate, and implement data quality objectives, statistical sampling designs, and systematic planning for data gathering and monitoring studies
- Provide general program coordination support such as contacting participants, maintaining communications with participants, resolving issues or discrepancies, etc.
- Coordinate sampling schedule with field sampling teams to ensure teams receive proper sampling kits and materials prior to field collection efforts
- Develop sampling kits for GLFMSP and other studies
- Coordinate laboratory analysis with laboratories operating under contracts or grants with either EPA or with state partners in the Great Lakes Basin
- Procure laboratory supplies
- Track supplies shipped to participant laboratories
- Coordinate with all parties and shipping companies, such as Federal Express, to ensure that proper shipping protocols are followed to avoid delays and holding time issues with samples
- Review preliminary data to identify any issues
- Address any issues that were observed during preliminary analyses
- Develop detailed study instructions and updates
- Track shipments to laboratories

- Provide ongoing daily technical support to laboratories
- Provide logistical support to participating laboratories
- Troubleshoot problems that arise
- Follow-up with laboratories to request additional information or clarify any notes or study results Data review
- Review primary elements to verify calculation accuracy
- Validate primary data against method- and study-specific requirements
- Contact laboratories to resolve any data issues (e.g., missing information, discuss QC results)
- Assess individual laboratory results
- Perform data analysis and assess performance against data quality objectives
- Provide storage space for sampling kit materials and supplies and freezer space for archived GLFMSP samples, GLLA samples, and other study samples, through the length of the contract
- Provide fish homogenization support and other sample preparation support to GLFMSP and other studies
- Develop and maintain comprehensive sampling and analytical manuals containing current SOPs
- Create and maintain program documentation, tracking forms, field recording forms for GLLA, WQS, GLFMSP and other studies
- Provide support to the Research Vessel Mudpuppy including: Observing sampling activities, providing Global Positioning System (GPS) software training, and updating SOPs

Deliverables: Development, assembly and distribution of sampling kits; technical support to field teams for sampling and analysis; reports documenting research and evaluation of sampling and analytical procedures; procurement and oversight of sampling processing, archiving, and analysis laboratories; sampling and analytical manuals in hard-copy and electronic format suitable for upload to GLNPO's website; quality system documentation including documentation of data quality objectives and statistical sampling designs.

Task 4: Statistical Support and Data Interpretation

The contractor shall provide statistical support in planning, documenting, implementing, assessing, and reporting on environmental monitoring projects, special studies, and other strategies to implement GLNPO's programmatic objectives. The contractor shall conduct statistical and geostatistical data analysis and interpretation, including applying GIS and visualization tools, to describe, evaluate, and present environmental conditions. The contractor shall develop, evaluate, document, and apply environmental models to predict environmental conditions based on available data. Specific activities include:

- Assist with the development of data quality objectives and implementation of systematic planning for studies collecting or using environmental data, including assisting in development of statistical sampling designs and calculating statistical power and confidence associated with possible design scenarios

- Write and maintain automated programs for conducting statistical analysis of study data
- Provide summary and graphical representations of statistical data assessments for use in developing reports
- Design and conduct modeling and statistical analyses, such as parametric analyses (including linear and nonlinear regression analysis, ANOVA, two-sample and paired ttests) non-parametric analyses (including Sen regression analysis for detection and estimation of trends, Spearman rank correlations, Wilcoxon sign-rank and rank sum tests), and other statistical analyses and data interpretation strategies to support implementation and reporting of studies
- Develop, evaluate, and utilize algorithms to process satellite imagery and other remote sensing data for water quality and other environmental parameters
- Research, develop, and implement mathematical models and analyses to develop and evaluate temporal and spatial analysis of environmental parameters
- Evaluate available data for use in data interpretation and analysis, addressing data quality and scientific issues
- Research, identify, recommend, and implement appropriate statistical analyses to answer specific study questions
- Conduct geo-statistical analysis of environmental data including development, implementation, and evaluation of geo-statistical modeling efforts
- Provide summary and graphical representations of geo-statistical modeling results
- Present results of statistical analyses, modeling efforts, and other data interpretations strategies to EPA and project stakeholders
- Respond to technical questions regarding technical approaches, data interpretation strategies, and results
- Write and maintain programs for conducting statistical and geo-statistical analysis of project and QC data
- Assist EPA in interpreting and reporting environmental information using GIS
- Provide guidance on the statistical impacts of various aspects of environmental studies, including the effect of analytical precision, sensitivity and bias on study data and the ability to meet study goals
- Provide scientific, statistical, geo-statistical, and quality management support to evaluate, analyze, interpret and report on environmental data

When performing these activities, the contractor shall clearly specify the methods, procedures, assumptions, relevant citations, data sources, and data that support the results and any recommendations offered. Where applicable, the contractor also shall document alternative methods, procedures, and assumptions that were considered in the statistical analysis.

Deliverables: Data summaries, reports, and graphical illustrations detailing results of scientific, modeling, statistical, and geo-statistical analysis of environmental data; modeling and analysis of total phosphorus and other parameters including evaluation of statistical power to evaluate reductions in total phosphorus loading in different parts of the lakes reports detailing the technical approach, methods, procedures, assumptions, relevant citations, data sources, data and results of statistical and geo-statistical analysis of environmental data; maps of sampling stations and monitoring data.

Task 5: Development of Technical, QA, and Program Reports

The contractor shall assist EPA in developing comprehensive technical, quality assurance, and scientific reports on results of studies, strategies, and monitoring programs administered by GLNPO. This support shall primarily consist of collecting, compiling, analyzing and presenting data and information that EPA may use in decision making processes. The contractor shall provide all documents for WACOR review and approval, prior to production of the final version. Specific activities include:

- Review, compile, and summarize historical and current information associated with environmental monitoring, environmental remediation, environmental modeling, and other projects
- Develop graphics, maps, and illustrations, presenting data, project information, and results of data interpretation, analysis, and modeling
- Develop draft reports (e.g., limnology report) documenting project details and objectives, results, interpretation of data, and conclusions for EPA review
- Integrate comments received from reviewers into revised versions as directed by EPA
- Produce final hardcopy reports and electronic versions of final reports suitable for distribution on EPA websites
- Develop presentations detailing project information and data, graphical illustrations and maps of project information and data, modeling results, program information, and other information associated with GLNPO initiatives
- Develop materials presenting data and other information on Great Lakes initiatives for distribution and presentation on EPA websites

Deliverables: Subsequent versions of the Water Quality Survey Monitoring report revised to incorporate feedback from EPA on the draft. Assume support to development of annual reports to support the Biology, Limnology, and Great Lakes Fish Monitoring and Surveillance Program (GLFMSP).

Task 6: Program Management Support

As directed by the EPA WACOR, the contractor shall assist EPA in coordinating and administering GLNPO programs. The contractor shall provide scientific, technical, analytical, and administrative support for programmatic projects and initiatives. Specific activities include:

- Develop and implement tools for tracking, documenting, archiving, and presenting program information
- Compile and analyze programmatic information in support of development of reports, web content, outreach materials, briefings and presentations
- Develop for EPA review, and implement approaches and procedures, based on EPA standard procedures and guidelines as appropriate, to compile, document, track, archive and record programmatic information

Deliverables: Summaries and reports presenting program information. Assume 5-10 programmatic reports.

Task 7: Meeting and Outreach Support
The contractor shall coordinate and support meetings, workgroups, and conferences on environmental monitoring projects and other studies including providing technical support to develop guidance documents, studies, reports, and other materials related to the activities performed under this contract. The contractor shall prepare all documents for WACOR review and approval, prior to production of the final version.

Specific activities include:

- Develop technical documents (e.g., technical reports, data summaries, issue papers, briefing materials) to support EPA's analysis of technical issues and options related GLNPO programs
- Develop technical documents or outreach materials (e.g., fact sheets, brochures, presentations, guidance documents, training modules) to assist EPA Regions, States, and collaborators in implementing GLNPO programs
- Develop briefing materials and status reports related to GLNPO projects and support provided under this contract
- Assist EPA in disseminating information to stakeholders in the Great Lakes region
- Track communications and record interactions
- If requested by written technical direction from the EPA WACOR, identify and evaluate meeting locations; finalize meeting space logistics; finalize contract for meeting space; coordinate with meeting space personnel
- Recruit subject matter experts and set-up travel arrangements, consistent with EPA travel requirements
- Develop and facilitate registration materials
- Provide meeting facilitation, develop evaluation tools, take minutes, and distribute follow up materials
- If requested by written technical direction from the EPA WACOR, attending, presenting materials, or supporting EPA activities at technical workshops, conferences, symposiums, training sessions, or public meetings.

Deliverables: Presentations, fact sheets, meeting agendas, meeting registration websites, and meeting minutes.

The contractor shall assume one trip of one staff each for two days to Syracuse, NY; one trip of one staff each for three days to Ithaca, NY; one trip of one person for two days to Alpena, MI; one trip of one staff for three days to Buffalo, NY; one trip of five staff for four days to Toronto, Ontario; one trip of one staff for five days to Minneapolis, Minnesota; three trips of one staff for three days in Mount Pleasant, Michigan; and four trips of one staff for three days to Chicago, IL for estimating purposes.

IV. SCHEDULE OF DELIVERABLES:

Specific deliverables, by Task, are detailed in the table below. All work will be determined by written technical direction.

This work requires experience in the development and manipulation of basic geospatial datasets, map layer, geodatabases and ESRI map application templates. It is necessary for the contractor to have familiarity with EPA's Geoplatform, or a similar platform at another federal agency or department.

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0 - Work Plan, Progress evaluations, and Monthly Progress Reports		
Workplan and budget		According to contract
Monthly progress reports		Monthly
Task 1 - Scientific, Statistical, Visualization, and Quality Assurance Support to EPA's Great Lakes National Program Office - Quality Management Support		
Data quality assessments. Includes narrative detailing results of assessment		30 days after receipt of a complete data set
Technical support and materials for conducting on-site field and laboratory audits		To be established by written technical direction
Task 2 - Information Management Support		
Processing and upload of project data into the SeaBird data System		To be established by written technical direction
Processing and upload of project data into GLFMSP database		To be established by written technical direction
Processing and upload of GLFMSP, GLLA, and biological project data into the Great Lakes Environmental Database		To be established by written technical direction
Development and implementation of specific program queries for existing systems		To be established by written technical direction
Task 3 –		
Development of sampling designs		To be established by written technical direction
Evaluation of sampling designs		To be established by written technical direction
Development, assembly and distribution of sampling kits for the GLFMSP		To be established by written technical direction
Procurement and oversight of homogenization laboratory for the GLFMSP		To be established by written technical direction

Task 4 – Statistical Support and Data Interpretation	
Data analysis and modeling results for monitoring and assessment studies presented in data summaries and visualizations, technical reports, and maps	To be established by written technical direction
Conduct statistical analysis of biological and limnological data in support of annual reports	To be established by written technical direction
Task 5 – Development of Technical, QA, and Program Reports	
Technical, QA, and Program Management Reports	To be established by written technical direction
Task 6 – Program Management Support	
Program Management Support	To be established by written technical direction
Task 7 – Meeting and Outreach Support	
Provide technical support for webinars and teleconference meetings	To be established by written technical direction
Presentations and meeting minutes to support meeting and outreach tasks	14 days after provision of technical direction

V. MISCELLANEOUS:

Software Application Files and Accessibility:
Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0 or higher

The WACOR shall identify which of delivered products will require 508 compliance.

VI. TRAVEL

The contractor shall anticipate sixteen (16) contractor trips in support of this WA over the duration of the performance period. Travel will be directly related to the scope of this Work Assignment.

VII. MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than $20,000, shall be obtained by the EPA CL-COR as needed and provided to the Contracting Officer (CO). Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL-COR.

VIII. CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, CL-COR and/or WACOR.

IX. PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

X. Technical Direction

All direction under this WA will be provided as written technical direction from the WACOR, or Alternate WACOR, as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Contract Level Contracting Officer's Representative (CL COR) and the Contracting Officer (CO), and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate WACOR review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

XI. QUALITY ASSURANCE SURVEILLANCE PLAN:

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-14

☐ Other ☒ Amendment Number: 000001

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2019 Base Option Period Number 2	Great lakes program Office Sup

Contractor: CSRA LLC

Specify Section and paragraph of Contract SOW: 2.0

Purpose:
- ☐ Work Assignment
- ☒ Work Assignment Amendment
- ☐ Work Plan Approval
- ☐ Work Assignment Close-Out
- ☐ Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
The purpose of this amendment 1 to CSRA (EP-C-15-012) WA 02-14 is to make a change to Task 1, add LOE to Task 2 for the purpose of expanding the Data Submission and Data Status sites to accommodate IADN data, and add deliverables to Task 4 and 6. See Attached PWS.

☐ Superfund — Accounting and Appropriations Data — ☒ Non-Superfund

SFO (Max 2) ☐

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee:	LOE:
Contract Period: 08/01/2015 To 07/31/2019		
This Action:		
Total:		

Work Plan / Cost Estimate Approvals

	Cost/Fee	LOE:
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Louis Blume (Signature) (Date)		Branch/Mail Code: Phone Number: 312-353-2317 FAX Number:
Project Officer Name: Nancy Parrotta (Signature) (Date)		Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name (Signature) (Date)		Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart Donna Reinhart (Signature)	6/12/18 (Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

PERFORMANCE WORK STATEMENT
CSRA EP-C-15-012
Work Assignment No. 02-14
Amendment 1
Period of Performance: 8/1/17-7/31/18

I. ADMINISTRATIVE:

A. Title: Support to EPA's Great Lakes National Program Office

B. Work Assignment Manager:
Louis Blume

Great Lakes National Program Office
(GLNPO)
77 West Jackson Boulevard (MC: G-9J)
Chicago, IL 60604
312-353-2317
blume.louis@epa.gov

Alternate Work Assignment Manager:
Eric Osantowski

Great Lakes National Program Office
(GLNPO)
77 West Jackson Boulevard (MC: G-9J)
Chicago, IL 60604
312-353-1373
osantowski.eric@epa.gov

Louis Blume serves as the WACOR and Dr. Eric Osantowski serves as the Alternate WACOR. There are 3 Task Managers including 1) Elizabeth Murphy for the Great Lakes Fish Monitoring and Surveillance Program, 2) Dr. Eric Osantowski for the Biology and Limnology Programs, 3) Dr. Thomas Kevin O'Donnell for the Coastal Wetlands Monitoring Program, and 4) Derek Ager for the Integrated Atmospheric Deposition Network. Technical Direction for all programs will be provided by the WACOR.

Contract PWS Paragraph: 2.0

C. Quality Assurance:

Tasks 1, 2, 3, 4, and 5 in this work assignment require quality assurance (QA). Collection, use and analysis of data will be identical to the procedures described in the Project-Specific Quality Assurance Project Plan (PQAPP) completed under tasks 1, 2, 3, 4, and 5 of WA 01-14, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

D. Background: No Change

II. OBJECTIVE:

The purpose of this amendment 1 to work assignment 02-14 is to make a change to Task 1, add LOE to Task 2 for the purpose of expanding the Data Submission and Data Status sites to accommodate IADN data, and add deliverables to Task 4 and 6. Changes are redlined below.

This work will be completed commensurate with Sections 3.2 and 3.4 of the Contract Level PWS.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 - Work Plan, Progress evaluations, and Monthly Progress Reports: No Change

Task 1 - Scientific, Statistical, Visualization, and Quality Assurance Support to EPA's Great Lakes National Program Office - Quality Management Support

The contractor shall support implementation of GLNPO's Quality Management program including developing and implementing tools to inventory, track, assess, and report on project planning and quality documentation for GLNPO projects as indicated by written technical direction provided by the WACOR. The contractor shall assist EPA with reviewing, evaluating, and implementing EPA Quality Policy directives, guidance documents and other supporting materials. The contractor shall provide quality management support to the Great Lakes Fish Monitoring and Surveillance Program, the Water Quality Survey of the Great Lakes, and the Great Lakes Legacy Act Program, as well as other environmental monitoring programs and special studies. The contractor shall provide quality support to plan, document, conduct, evaluate, and report on environmental monitoring programs. Specific activities include:

- Conduct literature searches in support of the design of monitoring programs, interpretation of study data, and development of QA assessment parameters including data quality objectives
- Review and assess EPA Quality Policy initiatives, implementation and guidance materials
- Assist in the development and revision of quality system documentation
- Develop and implement procedures and checklists to review quality system documentation
- Develop and implement tools to inventory, track, assess, and report on project planning and quality documentation for GLNPO projects
- Provide standard reports on quality system documentation status for all GLNPO funded projects
- Evaluate sampling, analytical, and geospatial data reporting standards, data reporting forms, and supporting documentation
- Conduct data verification, data quality assessments, and data usability assessments and provide reports presenting the results of the reviews
- Develop, evaluate and implement statistical analyses in support of data quality assessments; create and maintain all supporting statistical programs
- Prepare QA reports for environmental monitoring and other study data
- Provide technical support for conducting on-site field or laboratory audits of EPA field contractors and contractor grantee laboratories and the laboratory aboard the Research Vessel Lake Guardian
- Provide technical and quality management support to review reports, journal articles, and

related documents
- Provide general technical and quality assurance support to plan, document, and implement monitoring programs and other special studies

As directed by the EPA WACOR, the contractor shall assist EPA in conducting or coordinating peer reviews of program methodology, strategies, methods, and protocols or other products related to this work assignment task. When coordinating reviews of study plans, protocols, methods, or third-party data (e.g., journals, grey literature, non-EPA databases, etc.), the contractor shall focus on determining the applicability of plans to specific EPA needs and shall make any appropriate recommendations to the EPA WACOR concerning their use in present form or with suggested modifications. The contractor shall ensure that in-house reviews are performed by qualified staff, and shall contact the author(s) of the subject materials to obtain additional information or clarifications about the material when such information is necessary to render a complete review.

The contractor shall provide or coordinate independent review of program methodology, strategies, methods, and protocols or other products related to this work assignment task as provided by written technical direction from the EPA WACOR. The contractor shall ensure that these independent reviews are conducted by technically qualified, independent reviewers in accordance with EPA's policy on peer review as outlined in EPA's Science Policy Council Handbook on Peer Review. In this effort, the contractor may identify and consult with experts in the specific area of interest to EPA.

Deliverables: Quality system documentation reviews in standardized formats, standard reports on quality system documentation status for all GLNPO funded projects, monthly status reports on quality system documentation, data quality assessment reports in standardized formats, audit checklists and other materials in support of field and laboratory audits, reports on field and laboratory audits, project-specific quality assurance reports, and technical support for conducting on-site field and laboratory audits. We estimate approximately 20-30 project level quality plan reviews along with 18-25 data package reviews. Specific details on expectations of reviews is defined above and in the specific work assignment quality documents (previously approved).

Task 2 - Information Management Support

The contractor shall maintain and operate existing information management systems to efficiently, securely, and systematically gather, store, and manipulate a variety of technical, environmental, statistical, scientific, quality, and laboratory information related to Great Lakes protection, characterization, evaluation, and remedial activities. The contractor shall assist EPA in planning and implementing information management systems based on detailed evaluation of existing systems, including expanding existing systems where appropriate. Please consider use of Agile Development approaches or methodology wherever applicable consistent with EPA's Office of Environmental Information (OEI) directives.

Specific activities include:

- Develop, document, and implement sampling, analytical, and geospatial data reporting standards, data reporting forms, and supporting documentation

- Maintain and operate existing information management systems
- Develop and implement standardized evaluation of data submittals against requirements of study databases and provide standard reports on results of the evaluation
- Convert hardcopy and electronic field and analytical data into complete electronic files compliant with specific data standards including the Great Lakes Environmental Database and the Great Lakes Sediment Database (GLSED)
- Update databases with incoming data and revised data submissions and track updates
- Assist with input, maintenance, retrieval, analysis, reporting, and reformatting/integration and normalization of environmental data from EPA databases

Deliverables: Maintenance and operation of existing information management systems; processing submitted data into EPA standard formats, such as the Great Lakes Environmental Database (GLENDA) Standard; standard reports on data submission evaluation; providing assistance to GLNPO on uploading datasets so they are publicly available through agency CDX and WQX connections; assisting the GLNPO Great Lakes Fish Monitoring and Surveillance Program (GLFMSP) with database queries that allow easy access by GLNPO and GLRI associated scientists and maintains a historical version controlled record for eventual public dissemination; assist the GLNPO Open Lake Limnology Monitoring Program with database queries that allow easy access by GLNPO and GLRI associated scientists and maintains a historical version controlled record for eventual public dissemination

Task 3: Sampling and Analytical Support: No Change

Task 4: Statistical Support and Data Interpretation

The contractor shall provide statistical support in planning, documenting, implementing, assessing, and reporting on environmental monitoring projects, special studies, and other strategies to implement GLNPO's programmatic objectives. The contractor shall conduct statistical and geostatistical data analysis and interpretation, including applying GIS and visualization tools, to describe, evaluate, and present environmental conditions. The contractor shall develop, evaluate, document, and apply environmental models to predict environmental conditions based on available data. Specific activities include:

- Assist with the development of data quality objectives and implementation of systematic planning for studies collecting or using environmental data, including assisting in development of statistical sampling designs and calculating statistical power and confidence associated with possible design scenarios
- Write and maintain automated programs for conducting statistical analysis of study data
- Provide summary and graphical representations of statistical data assessments for use in developing reports
- Design and conduct modeling and statistical analyses, such as parametric analyses (including linear and nonlinear regression analysis, ANOVA, two-sample and paired ttests) non-parametric analyses (including Sen regression analysis for detection and estimation of trends, Spearman rank correlations, Wilcoxon sign-rank and rank sum tests), and other statistical analyses and data interpretation strategies to support implementation and reporting of studies

- Develop, evaluate, and utilize algorithms to process satellite imagery and other remote sensing data for water quality and other environmental parameters
- Research, develop, and implement mathematical models and analyses to develop and evaluate temporal and spatial analysis of environmental parameters
- Evaluate available data for use in data interpretation and analysis, addressing data quality and scientific issues
- Research, identify, recommend, and implement appropriate statistical analyses to answer specific study questions
- Conduct geo-statistical analysis of environmental data including development, implementation, and evaluation of geo-statistical modeling efforts
- Provide summary and graphical representations of geo-statistical modeling results
- Present results of statistical analyses, modeling efforts, and other data interpretations strategies to EPA and project stakeholders
- Respond to technical questions regarding technical approaches, data interpretation strategies, and results
- Write and maintain programs for conducting statistical and geo-statistical analysis of project and QC data
- Assist EPA in interpreting and reporting environmental information using GIS
- Provide guidance on the statistical impacts of various aspects of environmental studies, including the effect of analytical precision, sensitivity and bias on study data and the ability to meet study goals
- Provide scientific, statistical, geo-statistical, and quality management support to evaluate, analyze, interpret and report on environmental data

When performing these activities, the contractor shall clearly specify the methods, procedures, assumptions, relevant citations, data sources, and data that support the results and any recommendations offered. Where applicable, the contractor also shall document alternative methods, procedures, and assumptions that were considered in the statistical analysis.

Deliverables: Data summaries, reports, and graphical illustrations detailing results of scientific, modeling, statistical, and geo-statistical analysis of environmental data; modeling and analysis of total phosphorus and other parameters including evaluation of statistical power to evaluate reductions in total phosphorus loading in different parts of the lakes reports detailing the technical approach, methods, procedures, assumptions, relevant citations, data sources, data and results of statistical and geo-statistical analysis of environmental data; maps of sampling stations and monitoring data; recommendations for tools to integrate data from the Coastal Wetland Database with other existing data sets, such as hydrological and land use data, in a mapping tool using ArcGIS.

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Task 5: Development of Technical, QA, and Program Reports: No change

Task 6: Program Management Support

As directed by the EPA WACOR, the contractor shall assist EPA in coordinating and administering GLNPO programs. The contractor shall provide scientific, technical, analytical,

and administrative support for programmatic projects and initiatives. Specific activities include:

- Develop and implement tools for tracking, documenting, archiving, and presenting program information
- Compile and analyze programmatic information in support of development of reports, web content, outreach materials, briefings and presentations
- Develop for EPA review, and implement approaches and procedures, based on EPA standard procedures and guidelines as appropriate, to compile, document, track, archive and record programmatic information

- **Deliverables:** Summaries and reports presenting program information. Assume 5-10 programmatic reports. Categorizing the 280 boxes by major group and determine a process for management and disposition (digitization, archiving digitally or to FRC, or disposal) of boxes by major group, then work with GLNPO and the GLNPO Records Manager to complete those processes by major box group. As prioritized by the GLNPO Science, Monitoring, Evaluation and Reporting (SMER) section, review, organize, and digitize science records to make them available electronically to GLNPO staff or outside researchers. Complete the historical record of the Water Quality Survey (WQS) Standard Operating Procedures (SOPs) and Quality Assurance Project Plans (QAPPs). Complete the inventory and assessment of biology samples in the 536 S. Clark, Chicago, storage room.

Task 7: Meeting and Outreach Support: No Change
The contractor shall assume one trip of one staff each for two days to Syracuse, NY; one trip of one staff each for three days to Ithaca, NY; one trip of one person for two days to Alpena, MI; one trip of one staff for three days to Buffalo, NY; one trip of five staff for four days to Toronto, Ontario; one trip of one staff for five days to Minneapolis, Minnesota; three trips of one staff for three days in Mount Pleasant, Michigan; and four trips of one staff for three days to Chicago, IL for estimating purposes.

IV. SCHEDULE OF DELIVERABLES:

Specific deliverables, by Task, are detailed in the table below. All work will be determined by written technical direction.

This work requires experience in the development and manipulation of basic geospatial datasets, map layer, geodatabases and ESRI map application templates. It is necessary for the contractor to have familiarity with EPA's Geoplatform, or a similar platform at another federal agency or department.

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0 - Work Plan, Progress evaluations, and Monthly Progress Reports		
Workplan and budget		According to contract
Monthly progress reports		Monthly

Task 1 - Scientific, Statistical, Visualization, and Quality Assurance Support to EPA's Great Lakes National Program Office - Quality Management Support	
Data quality assessments. Includes narrative detailing results of assessment	30 days after receipt of a complete data set
SOP and narrative template for IADN	To be established by written technical direction
Technical support and materials for conducting on-site field and laboratory audits	To be established by written technical direction
Task 2 - Information Management Support	
Processing and upload of project data into the SeaBird data System	To be established by written technical direction
Processing and upload of project data into GLFMSP database	To be established by written technical direction
Processing and upload of GLFMSP, GLLA, and biological project data into the Great Lakes Environmental Database	To be established by written technical direction
Development and implementation of specific program queries for existing systems	To be established by written technical direction
Expansion of the Data Submission and Data Status sites to accommodate IADN data	To be established by written technical direction
Task 3 –	
Development of sampling designs	To be established by written technical direction
Evaluation of sampling designs	To be established by written technical direction
Development, assembly and distribution of sampling kits for the GLFMSP	To be established by written technical direction
Procurement and oversight of homogenization laboratory for the GLFMSP	To be established by written technical direction
Task 4 – Statistical Support and Data Interpretation	
Data analysis and modeling results for monitoring and assessment studies presented in data summaries and visualizations, technical reports, and maps	To be established by written technical direction

Conduct statistical analysis of biological and limnological data in support of annual reports	To be established by written technical direction
Recommendations for tools to integrate data from the Coastal Wetland Database with other existing data sets, such as hydrological and land use data, in a mapping tool using ArcGIS.	To be established by written technical direction
Task 5 – Development of Technical, QA, and Program Reports	
Technical, QA, and Program Management Reports	To be established by written technical direction
Task 6 – Program Management Support	
Program Management Support	To be established by written technical direction
Complete inventory and assessment of biology samples in the 536 S. Clark, Chicago, storage room	To be established by written technical direction
Complete historical record of the Water Quality Survey (WQS) Standard Operating Procedures (SOPs) and Quality Assurance Project Plans (QAPPs)	To be established by written technical direction
As prioritized by the GLNPO SMER section, digitized science records to make them available electronically to GLNPO staff or outside researchers.	To be established by written technical direction
List of boxes by category as prioritized by the SMER section	To be established by written technical direction
Task 7 – Meeting and Outreach Support	
Provide technical support for webinars and teleconference meetings	To be established by written technical direction
Presentations and meeting minutes to support meeting and outreach tasks	14 days after provision of technical direction

V. MISCELLANEOUS:

Software Application Files and Accessibility:
Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format: MS Word, 8.0 or higher (Office 2007 or higher)

Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0 or higher

The WACOR shall identify which of delivered products will require 508 compliance.

VI. TRAVEL

The contractor shall anticipate sixteen (16) contractor trips in support of this WA over the duration of the performance period. Travel will be directly related to the scope of this Work Assignment.

VII. MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than $20,000, shall be obtained by the EPA CL-COR as needed and provided to the Contracting Officer (CO). Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL-COR.

VIII. CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, CL-COR and/or WACOR.

IX. PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

X. Technical Direction

All direction under this WA will be provided as written technical direction from the WACOR, or Alternate WACOR, as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Contract Level Contracting Officer's Representative (CL COR) and the Contracting Officer (CO), and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA WACOR in draft form for review and comment. The contractor shall incorporate WACOR review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

XI. QUALITY ASSURANCE SURVEILLANCE PLAN:

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 02-15

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-15-012	08/01/2015 To 07/31/2018 Base Option Period Number 2	Organic Materials Management

Contractor	Specify Section and paragraph of Contract SOW
CSRA LLC	2.2., 2.10, 2.16

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2017 To 07/31/2018

Comments:
In accordance with clause B.1 immediate start is authorized for this work assignment. If the work plan is not approved within 35 calendar days after receipt of the work plan, the contractor shall stop work.

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Cost/Fee:	LOE:
Contract Period: 08/01/2015 To 07/31/2018		0
This Action:		800
Total:		800

Work Plan / Cost Estimate Approvals

Contractor WP Dated:	Cost/Fee	LOE:
Cumulative Approved:	Cost/Fee	LOE:

Work Assignment Manager Name: Steven Rock (Signature) (Date)	Branch/Mail Code: Phone Number: 513-569-7149 FAX Number:
Project Officer Name: Nancy Parrotta (Signature) (Date)	Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:
Other Agency Official Name: (Signature) (Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Donna Reinhart DONNA REINHART (Signature) (Date)	Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:

Digitally signed by DONNA REINHART
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=DONNA REINHART, dnQualifier=0000010546
Date: 2017.08.09 08:18:07 -04'00'

Contract No. EP-C-15-012 CSRA LLC for Option Period 2

Work Assignment: 02-15

WACOR: Steve Rock
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Task 3 Melissa Penington

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LOE: 800 hours

Period of Performance: Effective date of WA through July 31, 2018

I. Purpose

The purpose of this work assignment is to advance the understanding and best practices of Organic Materials Management.

To achieve this purpose, the contractor shall be expected to conduct an evaluation of the organic waste management system at 29 Palms Marine Base in California, and to support the anaerobic digester database work of Melissa Pennington in Region 3 Philadelphia.

The intended audience for this project is the general public, public officials, owners and managers of food providers and the food waste reduction community.

II. Background

Currently, up to 40% of food produced in the U.S. is wasted, and 95% of wasted food is landfilled. Landfills are the third largest anthropogenic source of methane (CH4) emissions in the U.S., accounting for 18% of total emissions in 2012. CH4 contributes to more than one-third of today's anthropogenic warming because its global warming potential is at least 25 times greater than CO2. Diverting wasted food and other organics from landfills dramatically reduces its greenhouse gas impact.

Many states are implementing regulations that require diversion of food waste and other organics from landfills. Massachusetts and California have banned commercial organic waste from landfills. Likewise, Connecticut and Vermont have set limits on food waste going to landfills.

States and communities know how much food in aggregate is landfilled. However, most are lacking detailed information on the sources of this waste, especially with regard to the food-processing sector. This lack of information regarding food waste producers is hampering efforts to implement regulations and reduce greenhouse gas emissions. As a result, there is a strong regional and national need to research commercial and industrial sources and quantities of food waste, and to make this information accessible and useful to communities in fulfilling greenhouse gas reduction and sustainability goals.

III. QUALITY ASSURANCE

Tasks in this work assignment do not require Quality Assurance Project Plans (QAPP). Consistent with the Agency's QA requirements, the contractor does not need to supplement the Contract Quality Assurance Project Plan (QAPP) or to prepare a Project Specific Quality Assurance Project Plan (PQAPP).

IV. Detailed Task Description

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs. In addition,

The contractor shall use the "Project Planning Checklist" Attachment B to the Contract QMP to define QA tools and procedures used in each of the tasks, consistent with the requirements of the QMP. A copy

of the completed checklist is to be provided to the ORD WACOR and other project participants for review and retained in the project files for each task.

If the scope of project tasks changes to include collection of environmental data, or use of secondary data, a determination will be made to develop a QAPP for the task, consistent with the requirements of *EPA Requirements for QA Project Plans (QA/R-5).*"

This task also includes monthly progress and financial reports. Monthly financial reports must include a table with the invoice LOE and cost amount broken out by the tasks in this WA.

Deliverables: Work plan and monthly progress and financial reports.

Task 1 Food Waste Management Technology Demonstration at Military Bases

Project Scope: Pursuant to the Memorandums of Understanding between the U.S. EPA's Office of Research and Development (ORD) and the U.S. Army for Installations, Energy and Environment (IE&E) around Net Zero, ORCA, and EnviroPure. The objectives of this project is to provide a proof-of-concept evaluation and demonstration of a food waste prevention technology that can potentially be used to achieve zero waste related goals. The demonstrations will be held in dining facilities at two independent Army installations, each with distinct waste generation profiles and demographics: 29 Palms Marine Base. The evaluation will last approximately six months. Technical and research support services are envisioned for all phases of the project including baseline evaluation; demonstration support and monitoring; data analysis; and documentation of research results.

IV. Purpose

The Office of Research and Development (ORD) in the US Environmental Protection Agency (EPA) seeks out collaborative research and development projects and demonstrations that can advance key environmental science questions while assisting on-the-ground decision makers with better options to systematically manage energy, water, and waste. ORD engaged with Department of Defense (DoD) installations in the Mojave Desert region to explore planning options for resilient operations to address uncertainties in water, energy, and waste management. In meeting with the Marine Corps Air Ground Combat Center Twentynine Palms (MCAGCC) installation, one area of interest was organic waste recovery technologies. The purpose of this proposed research would be to advance the understanding and best practices of water recovery from organic waste streams. To achieve this purpose, EPA will systemically evaluate the use and performance of existing waste-to-water recovery technology currently in use at 3 dining facilities ("chow halls") located at MCAGCC, and to be installed at Camp Wilson. Based on the results of the evaluation, EPA will work with MCAGCC and DoD staff to make recommendations to the base and other DoD installations as to the use of this waste-water technology and how to optimize its potential for a given context/ operating environment. The results of the study will help DoD and other stakeholders understand the potential of waste-to-water technology as a DoD-wide water recovery solution.

V. Background

Currently, up to 40% of food produced in the U.S. is wasted, and 95% of wasted food is landfilled. DoD installations in the Mojave Desert face extreme challenges with securing and maintaining adequate water supplies to support drinking water, irrigation, recreation, and maintenance needs. Volumes of food waste and pressure on limited water supplies are likely to increase in the short term with projected military build-up, and in the long term as the installation continues to meet the security needs of the country in future decades. MCAGCC is meeting both of these challenges in an integrated way through application the "ORCA" proprietary food waste to water recovery technologies. MCAGCC plans to install a different system, "EnviroPure" at Camp Wilson. Both technologies are food waste decomposition systems that break down food waste into greywater effluent. The OCRA system is currently installed and recovers water from food waste in the three (3) main side Chow Halls which are the primary source of food for Marines stationed at the installation. The EnviroPure system will be installed at another chow hall at Camp Wilson later this year. The reclaimed water is currently used to supplement water needed to run the base wastewater treatment plant. However, apart from gallons recovered, little is known about the life cycle costs/ benefits of this technology in terms of factors such as energy inputs, staff time, water quality outputs, and maintenance costs. A holistic, systems based analysis of system performance in the waste-water-energy-nexus context would help the installation and other stakeholders in similar circumstances better understand how to optimize the deployment and operation of these and similar water recovery systems.

VI. TASK DESCRIPTION AND RESEARCH QUESTIONS

EPA will perform a multi-scale (energy, water, waste, and economic) "Consumer Reports" style evaluation of the ORCA technology at the 3 main side Chow Halls at MCAGCC, and the EnviroPure technology to be installed at Camp Wilson. The aim is to evaluate the claims of the manufacturers for the particular use of these devices in a real-world kitchen, and in the broader contexts of the energy, water and waste profile of the base itself, and the unique Mojave environment.

The performance evaluation will incorporate, but is not limited to, Life Cycle Cost analysis, analysis of water quality and quantity, and waste stream characterization. The specifics of the evaluation are open to input from MCAGCC and DoD personnel, but at a minimum, it is expected that EPA shall seek to answer the following questions about real world use, performance, and optimization of this technology at the installation:

- How is the technology used currently, and how does this compare to the manufacturer's recommendation installation/ use?
- What are the inputs in water, energy, time? What are the tradeoffs or offsets?
- What are the outputs, in terms of water quantity and quality?
- Which food waste types provide the most water recovery?
- What is the overall impact on food waste volumes?

- What is the "Carbon footprint" for the technology and what impact does the technology have on the carbon footprint of organic waste sent to landfill?
- What is the impact on the wastewater treatment facility in terms of BOD? Are there other materials of concern in the wastewater?
- What are the economics of the device – capital, maintenance, and running cost; avoided cost of landfilling wasted food; time of personnel more or less using it?
- What quality of work space factors are impacted, such as convenience and smell?
- What compatible upstream or downstream technologies or practices could enhance performance?
- Given the previous questions, how could use of the technology be optimized from a systems perspective (energy, waste, water, economics) for MCAGCC or other installations?
- Given the previous questions, how can MCAGCC easily capture metrics on landfill diversion?

VII. SPECIFIC TASKS

Task 1.1: Site Characterization

EPA, with the assistance of contracted support, will evaluate the installation/ deployment and use of the ORCA and EnviroPure technologies at MCAGCC in order to assess the potential for the technologies to operate as it should according to Manufacturers' specs. This will provide an important contextual baseline for assessing the whole systems effectiveness of the technology. This should include interviews or observations of kitchen staff and collection of whatever baseline energy, water, and economic performance data is already available.

An on-site waste stream characterization analysis would provide a baseline estimate of waste generation and allow for an evaluation on the relative impact of the technology with respect to diversion. The procedure for the characterization method and analysis will closely follow the standard test method set forth by ASTM International (D5231-92, reapproved 2008).

Task 1.2: Develop Testing Protocol and Data Collection Plan

Develop a standard waste mix that would be fed into the device. The food waste mix should be representative of a typical restaurant, cafeteria, or other food service institution. The same inputs would be metered. Having a standard food waste mix will allow comparison across devices and across bases. Based on the results of the site characterization in Task 1, EPA and MCAGCC staff will develop a plan for collecting relevant water quality, quantity, waste, energy, and economic data for a specified time period to meet the objectives outlined above. The plan will identify data sources, reference quality management procedures, and specify a timeframe for data collection activities.

Task 1.3: Data Collection and Evaluation

Once concurrence is established on the Data Collection Plan, necessary data shall be collected and an LCA analysis performed in order to provide answers to each of the research questions outlined above and any supplemental questions contained in the characterization report. Scenarios will be constructed using available data from MCAGCC, other compatible locations, and EPA LCA programs to help answer questions about optimization or and beneficial deployment options.

Task 1.4 Production of Final Report

In addition to generating data on system performance, the results of the evaluation will inform a report to DoD on how deployment of waste-to-water technology can be optimized in terms of physical operating environment, enhancement with compatible upstream and downstream technology, and in context of the wider resource needs/ flows of a military base. The report will provide guidance on site specific constraints or selection criteria for deployment and use of the technology, recommendations for how performance could be enhanced in combination with compatible technologies, and an overall assessmnt of the viability of this technology as a water recovery solution at both the site/ installation level and DoD wide. The report will also provide information to MCAGCC staff on how they can most easily capture metrics associated with diverting food waste from landfills. The intended audience for this project and final report is MCAGCC staff, DoD staff at other Mojave installations and more broadly, public officials, owners and managers of food providers, and the materials/waste management community.

Task 2 Anaerobic Digestion Facilities Processing Wasted Food Data Collection Project

Project Summary

The Sustainable Food Management (SFM) program promotes diversion of wasted food from landfills. As this practice gathers momentum in this country, increasing amounts of municipal solid waste (MSW) will be processed using anaerobic digestion. To meet this need, sufficient capacity to process the organic fraction of MSW is needed. Therefore, building capacity for composting and anaerobic digestion is a critical component of the SFM strategy.

EPA is preparing to launch a data collection effort that will establish a baseline capacity for processing food waste in anaerobic digesters in the US. The data will be collected annually in order to track the growth of this capacity over time.

Region 3 has developed a preliminary data set of anaerobic digestion (AD) facilities processing food waste using publically available data.

Goal(s):

1. For the existing EPA data set: Identify and provide accurate contact information, where needed, for as many data collection respondents as possible.
2. Identify facilities not included in the existing EPA data set and provide accurate contact information for these facilities.

3. Insure the best possible response rate by contacting facilities that have not responded to the surveys.

EPA is seeking assistance in three areas as described below. Each task will be done in succession.

SPECIFIC TASKS

Task 2.1: Filling Gaps in the Existing Data Set

In order to collect the data – EPA has to make sure the data is collected effectively. To do this gaps need to be filled in the existing data prior to distribution of surveys.

- EPA will provide the contractor with a spreadsheet of all facilities in the existing EPA data set that require additional information.
- EPA anticipates this spreadsheet will include 50 or less facilities.
- The contractor will research and identify the following information for each facility:
    - Street address of facility
    - City (Facility is located in)
    - State (Facility is located in)
    - EPA Region (Facility is located in)
    - Zip Code (for facility location)
    - Facility phone number
    - Contact Name

    *The contact needs to be someone who is associated with and has knowledge of the operation of the facility. Administrative employees are not suitable contacts. Vendors that built the facilities are not preferred.

    - Contact Title, position, or affiliation to the facility
    - Email of contact
    - Phone number for contact
    - Mailing address (for contact)
    - Type of Facility (Stand-alone, WWTP, or On-Farm)
    - Operating Status (Planning stage/Design Stage/Permitting, Under Construction, Operational, Temporary Shut-down, Ceased Operation, Other)

Task 2.2: Identification of Additional AD Facilities

EPA will provide the contractor with a spreadsheet of all facilities in the existing EPA data set. This spreadsheet currently includes 135 facilities.

Using the following sources the contractor will research and identify facilities that that are not currently in the existing EPA data set. These facilities must be anaerobic digestion facilities that process food-based feedstocks.

- Data received from the Water Environment Federation (WEF);
- Data received from Environmental Research and Education Foundation (EREF);
- Data obtained from EPA's AgSTAR database;
- American Biogas Council (ABC) project profiles;
- Information obtained from BioCycle's Find-a-Digester platform;

- State databases; and
- Other relevant sources.

For each newly identified facility, the contractor shall collect all of the data identified in task 1.

Task 2.3: Respondent Follow-up

The data will be collected using three different survey monkey surveys, one for each type of digester that EPA is collecting data on (stand-alone digesters, digesters at wastewater treatment plants and on-farm digesters). After the data collection surveys have been distributed, responses will be automatically collected into spreadsheets by survey monkey. EPA will periodically identify what facilities have not yet provided responses.

EPA will provide the contractor with a list of facilities that have not provided responses to the surveys. The contractor will contact these respondents by phone to:

- Bring the survey to the respondents attention and request that the respondent complete the survey
- Answer respondents questions about the survey
- Clarify responses and/or
- Manually collect data over the phone and enter into the surveys if requested to do so.

Deliverables:

1. For the existing EPA data set: Identify and provide accurate contact information, where needed, for as many data collection respondents as possible.
2. Identify facilities not included in the existing EPA data set and provide accurate contact information for these facilities.
3. Insure the best possible response rate by contacting facilities that have not responded to the surveys. Contact non-responders and attempt to complete survey. It is anticipated that there will be approximately 40 facilities to contact.

V. SCHEDULE/DELIVERABLES

Task	Deliverables	Dates
0 Ongoing	1)Workplan 2)Monthly Progress and Financial Reports	1)in accordance with contract requirements 2)Monthly
1 Food Waste Management Technology Demonstration at Military Bases	1)Demonstration facilitation 2)Report 3)Revised report following EPA comments	1) Approx. Aug. 15 – Feb. 15 2) 30 days after demonstration ends 3) 30 days after initial report

2 Anaerobic Digestion Facilities Processing Wasted Food Data Collection	1)complete EPA provided database 2) research facilities missing from EPA database 3)contact non-respondents of survey	1) Sept 1 2) March 30 3) 30 days following EPA distribution of surveys

VI. REPORTING REQUIREMENTS

Monthly Progress Reports (including a progress evaluation discussion)

Financial Reports

Project-Specific Reports

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, *Acquisition of environmentally preferable meeting and conference services (May 2007),* for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

VIII. CONFERENCES AND WORKSHOPS

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05. And the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WA COR to any anticipated event under the work assignment which may result in incurring an estimated $20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Any event which meets the definition of a "conference," with total net expenditures greater than $20,000, is required to submit EPA Electronic Form 5170 and Form 5170-A (with cost estimates/actuals).

In the case the workflow system is down and CORs require emergency approval, they can submit EPA Form 5170 (PDF) (2pp, 93K) (with cost estimates) to conference@epa.gov.

IX. SOFTWARE APPLICATION AND ACCESSIBILITY (SECTION 508 REHABILITATION ACT AND AMENDMENTS)

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: http://www.section508.gov/

Preferred text format:	MS Word, 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

The WACOR shall identify which of delivered products will require 508 compliance.

QUALITY ASSURANCE SURVEILLANCE PLAN

for WSD's Mission Support

Quality Assurance Surveillance Plan

The requirements contained in this WA are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described in Attachment 4 of the contract. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The WACOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the CLCOR in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.